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HINTS TO MOTHERS,

FOR THE MANAGEMENT OF HEALTH

DURING THE PERIOD OF PREGNANCY,

AND IN

THE LYING-IN-ROOM;

WITH AN EXPOSURE OF POPULAR ERRORS IN CONNEXION
WITH THOSE SUBJECTS.

✓
BY THOMAS BULL, M. D.,

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OF WOMEN AND CHILDREN

FROM THE THIRD LONDON EDITION.
WITH ADDITIONS BY AN AMERICAN PHYSICIAN

TO WHICH IS ADDED,
THE LADIES' PERPETUAL CALENDAR.

NEW YORK:
JOHN WILEY & SON.
535 BROADWAY.
1868.

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P R E F A C E

THE object of the publication of this work is so well stated by Dr. Bull, that it is unnecessary for the American Editor to make any remarks. He would merely state that the additions which he has contributed, are the result of twelve years' devotion to the obstetric art. Dr. Bull remarks:—

“In the minds of married women, and especially in young females, those feelings of delicacy naturally and commendably exist which prevent a full disclosure of their circumstances, when they find it necessary to consult their medical advisers. To meet this difficulty, and also to counteract the ill-advised suggestions of ignorant persons during the period of confinement, is the chief object of the following pages.

“While it is believed that much of the information contained in this volume is highly important to the comfort, and even to the well-doing of the married female, much of it is, at the same time, of a character upon which she cannot easily obtain satisfaction. She will find no difficulty in *reading* information, for which she would find it insuperably difficult to *ask*.

“There are many little circumstances, too, in which I do not occur to seek for advice, of the nature and result

of which she ought not to be ignorant. Young married women are especially liable to many needless, yet harassing fears, which it has been the anxious object of the author to remove, by showing that they have no foundation in truth. It has often been necessary to be minute, but *that*, it is imagined, will not be regarded as an imperfection.

"The author's connexion for some years past with a large and important midwifery institution, has led him to direct especial attention to the important subject upon which he has ventured to appear before the public, and he must leave his work with them, in the hope that he has not written altogether in vain.

"FINSBURY PLACE, London, 1841."

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HINTS TO MOTHERS.

CHAPTER I

OF POPULAR ERRORS ON THE SUBJECT OF PREGNANCY

DURING the period of pregnancy, the happiness of a nervous and anxious woman is often completely destroyed, by the influence of many popular errors upon the subject which still prevail. And, what will be thought still worse, the effect of these prejudices on the constitution of the mother will be found more or less to impair the health and future vigour of her offspring.

It may be urged, that the day is past when prejudices of this kind can operate; that the tales and fears of former times exist no longer; and, that the well-educated woman regards even the direct counsels of the ignorant, as little as she heeds the gloomy forebodings and prophesies of popular credulity. To this I cannot give my assent: it may be admitted, indeed, that when truth is properly

presented to such minds, it will be at once received ; yet, as a subject like this has never been plainly discussed with a view to popular perusal, I find even now the sensible, and otherwise strong-minded woman, more or less under the influence of notions as absurd in themselves, as they are mischievous in their tendency.

Every medical man much engaged in the lying-in-room can attest the truth of this statement ; and, were it necessary, it were easy to adduce the most ample evidence upon the subject. Believing, however, that this point will be undisputed, I would rather at once proceed, impartially, to specify a few of these still popular absurdities.

In this inquiry I shall be as brief as possible, examining those errors only which are most prevalent ; and if successful in pointing out their folly, shall attain my end. In treating this part of our subject, my principal aim is to convince the nervous and timid woman, that pregnancy is not to be looked upon as necessarily a period of deprivation and suffering ; but, as it truly is, *a state demanding only a little more than ordinary care and prudence, and compatible with the enjoyment of health and comfort.* Let it be remembered also, that the period of pregnancy is not, as is sometimes supposed, a morbid state, a state of disease. Far from it, it is a natural state ; although a wise Providence has justly ordered that in sorrow shall the woman conceive and bring forth offspring. Now

whatever part of nature be regarded, it will be seen that the means are always provided to accomplish her ends, and that too without much difficulty. This view of the subject is, we think, calculated to save females many anxious moments and many pangs of uneasiness.

SECT. I.—OF THE SUPPOSED INFLUENCE OF THE IMAGINATION OF THE MOTHER UPON THE CHILD IN THE WOMB.

The supposed influence of the imagination of the mother upon the child in her womb is an error still popularly current ; and though reason, experience, and anatomical knowledge, concur to refute this notion, it is received by many as an established truth, and often tends more than any other delusion of the mind, during pregnancy, to render the female truly wretched. Should a woman have an ungratified longing for some particular article of food ; should she have been suddenly and seriously frightened—or occasionally the witness of some miserably deformed object—it is frequently the case, that she at once becomes possessed with the belief, that her unborn babe will receive a mark, blemish, or deformity, similar to the thing longed for, or to that which caused her alarm, or excited her aversion. From the time of this occurrence

the idea haunts her imagination night and day ; a victim to the influence of an evil called into existence by her own fancy, she is wretched and miserable. Ashamed of her weakness, she imparts her secret to none ; she will hardly confess it to herself ; yet does its impression deepen upon her mind, and she looks forward to the period of her confinement with the greatest dread and apprehension. Thus the whole period of pregnancy is made a season of needless trial and suffering ; and nothing pacifies her mind, or can remove her long-cherished fears, but the birth of an unblemished and healthy child.

The origin of this belief in the power of the imagination during pregnancy, is coeval with our earliest records ; and the multitude of instances handed down to us, in which its influence was supposed to be exerted, would fill a goodly volume : but neither the antiquity of its source, or the abundance of the evidence of its supposed truth, can entitle it to the least weight, if it can be proved that it is inconsistent with anatomical science, experience, and reason.

The first point which we should naturally consider in this inquiry would be, the nature of the connexion between the parent and her offspring ; and anatomy proves two most important facts : First, that there is no communication whatever between the nerves of the mother and the child, an assertion which although denied by some anato-

mists, yet is favoured by the most of the profession; and secondly, that the infant has its own distinct circulation, carried on by the action of its own heart and blood-vessels, forming a circle within itself, and having no direct communication with the vessels of the mother.

How then is it possible, when no nervous connexion exists, that the sensation, fears, and desires of the mother, should in any way be communicated to the child; or that any impression on the imagination of the former, should produce any changes in the structure or appearance of the latter? Did it ever happen to any woman, by any series of fancies or desires, that the figure of the objects of them was traced upon her own skin? Does she then suppose it more probable, or indeed possible, that such changes or appearances should be impressed upon the infant, thus insulated from any nervous influence of the parent? Anatomy, then, proves nothing in favour of this doctrine, but presents an unanswerable difficulty opposed to it, demonstrating most clearly that the infant is not one body with the mother, any more than a plant is one substance with the earth which nourishes it.

Let us next examine the various deformities said to be produced in the body of the little one by this powerful agent. First: It is said to impose upon its skin certain resemblances to things on which the fancy has been busily occupied, or dwelt upon: such as fruit, wine, insects, or animals. Second:

To produce additional parts: as an increased number of limbs, toes, or fingers, etc. Third, To destroy certain parts of the child's body: as a leg, or arm, or both; and to effect the want of a lip or portion of it, a hand, or foot, &c. These *three effects*, tending either to the *increase, decrease, or alteration of parts*, include almost every variety of case supposed to be produced by the power of the imagination.

The most common of these deformities are the first: the marks and moles on the skin. The former, generally of a red or purplish colour, are said to resemble different sorts of fruit—such as raspberries, strawberries, mulberries, cherries, etc.; and if a child is born with such a discolouration or mark on the surface of its body, it is frequently ascribed to the disappointed longings of the female during her pregnancy, for the particular fruit which the mark is declared to resemble. The latter, the moles, being covered with a downy hair, are compared to the skin of a mouse, mole, or some other animal; and their presence is referred to some agitation of mind occasioned by one of these objects running in sight of, or against the individual while pregnant.

It would be easy to cite very many cases that are on record of these “discolourings of the skin—such as redness from women's longing for claret, or having the same suddenly spilt upon them;” of marks “of foods desired, but not obtained;” of

"excrencences, which, like the fruits they resemble, have their times of bloom, ripening, and languishing, though never quite dying or falling off themselves," etc., etc. Here, too, might be adduced a variety of the most extraordinary cases of deformity which have been very gravely related by our forefathers; and commented upon, believed in, and added to, by a few authors even of own day. Books abound with such statements, but their detail would only be a waste of time, for amidst the whole mass, there is not one case so fully and sufficiently authenticated as to enable me to bring it forward "for conviction," if I were an advocate, instead of being an opponent to the "imaginationists." Take, as an example, the following fable, which is extracted from a work published in London, 1723, by Dr Turner, entitled *De Morbis Cutaneis* :—

"Philippus Meurs, apostolical prothonotary and canon of St. Peter's in Louvain, a reverend ancient man, affirmed unto me, saith our author,* with sundry others, that he had a sister complete in the rest of her body, but without her head: Instead of which, was joined to her neck, the likeness of a shell-fish, having two valves, which shut and opened; and by which, from a spoon, she took her nourishment: and this, he said, was occasioned, for that his mother with child of her, had a

* Fienus de Virib. Imaginationis. 1608.

strong desire after some muscles she beheld in the market, but could not procure at that instant. This sister of his lived in this monstrous condition to eleven years old, and died then by accident, happening angrily and very strongly to bite the spoon they fed her with, and breaking those testaceous valves, died quickly after: He kept diverse of her pictures in his chamber, which, saith Fienus, the whole world hath seen, being more particularly famous and well known to all the city of Louvain."

This marvel is immediately followed by this observation of the learned doctor: "The case of Sebastian Munster, of the two children born growing together by the foreheads occasioned by a person coming behind the mother and another woman, at unawares, and wantonly striking their heads together, seemeth the less rare to us, who have seen here in London, within these few years, two girls brought out of Germany miserably complicate, or conjoined," etc.

Let us, however, for a moment take one of the doctor's own cases;—a case of deformity from a deficiency of the child's body—which I believe to be true; but then not brought about after the fashion which its author supposed. And I will endeavour, with this illustration, to show the absurdity of the whole matter. The case is related, in p. 174, chap. xii., in Dr. Turner's book:—Speaking of a man greatly deformed, he says: "But of this kind we have a sad instance at home, (I mean in this

city,) in a child of Sir J. B——'s. His lady, when advanced five or six months in her pregnancy, was so frightened at the unexpected view of a beggar's stump-arm upon the coach door, that the child, of which she was afterward delivered, was born wanting one of its hands, the stump resembling that of the beggar." Dr. T. adds, "How these strange alterations should be wrought, or the child cut, wounded or maimed, as if the same was really done with a weapon, while the mother is unhurt, and merely by the force of the imagination, is, I must confess, above my understanding; but it is a fact, undeniable."

Now let us for one moment consider, what an operation must have been performed to work this effect, to produce this fact undeniable! The child was some months old when the frightful object was seen by which the deformity was said to be produced. It is presumed it was of the natural and perfect form, and must, therefore, at this period, have been considerable in size, and the arm itself not small. This arm, then, must drop off by the power of the imagination; there must be no blood lost to endanger the life of the child; and the wound must be healed before the birth. This would seem improbable enough; but, admitting that the limb could drop off by the force of the mother's fancy, and that some cause could put a stop to the bleeding from the stump after the separation of the hand from the body, still the limb

must remain in the womb until the delivery, and the bones at least could not putrify, or waste away, although the flesh might. But is it stated in this case, or pretended in any other of a like kind, that any part of the deficient limb was found by the medical attendant, nurse, or by anybody else?—Never. We hear nothing of the decayed hand, either in this or in any other case we may be curious enough to search after.

There is one other point in connexion with all cases of this kind; and that is, the stumps of all such imperfect and deformed limbs have always smoothness and regularity of the skin covering them—which plainly indicates, that from their *earliest* formation they must have been of the same figure: for had the arm in this case dropped off, there must have been a wound; and if there had been a wound, there must have been a scar, at all times sufficiently distinguishable from sound skin.

Will any one have the temerity to affirm their belief that, in this case, the force of the affrighted lady's imagination lopped off her child's limb—stanched the bleeding wound—healed it without a scar—and then, by some other extraordinary mental effort, rid itself of the offensive, but unoffending, member? Can man or woman by the force of imagination add an inch to their stature, or take an inch from it, or transform any part of *their* bodies into the resemblance of other animals, of vegetables, or of fruit? Is it not then absurd

to suppose, that a woman has more influence over another than over her own body ; that she should be able, by an effort of the imagination, to add *new* parts to a child already completely formed—to destroy any of the parts so formed—or *transmute* any of those parts into other forms of structure ? There can be no doubt that deformity existed at birth in the case just quoted ; but then the little one was deformed from its earliest formation, months before the mother's alarm, and, therefore, altogether unconnected with it ; at the same time it must be confessed, the beggar's stump and the handless child were an extraordinary coincidence.

Again, with respect to marks, moles, and other blemishes on the skin ; the resemblances which they are said to bear to fruit, etc., is purely fanciful. For instance, I operated, only a short time since, upon a very large one situated on the forehead of a child. The lively imagination of the mother, led her to believe that it was the exact counterpart of a ripe peach ; it might be something like it ; but it consisted, as all these nævi or marks do, of nothing more than a multiplicity or net-work of small blood-vessels ; and at its most prominent part, the vessels being large and distended with blood, gave it the purplish or dusky-red appearance, peculiar to all these tumours. This grew with the child from its earliest formation, as in the case of any other deformity—an extra toe, or finger, or hair-lip, for instance—and was the

creation of nature's will, and not the production of human caprice or fancy.

The late Dr. William Hunter investigated this subject at the Lying-in-Hospital to which he was attached. In every one of 2000 cases of labour, as soon as the woman was delivered, he inquired of her, whether she had been disappointed in any object of her longing ; and, if she replied in the affirmative, what it was ;—whether she had been surprised by any circumstance which had given her any unusual shock ; and what that consisted of ;—whether she had been alarmed by any object of an unsightly kind ; and what that was. Then, after making a note of each of the declarations of the women, either in the affirmative or negative, he carefully examined the child ; and he affirms, that he never, in a *single instance* of the 2000, met with a coincidence. He met with blemishes, when no cause was acknowledged ; and found none, when it had been insisted on.

[I attended a case recently, in which, if the imagination of the mother could have had any influence on the child, it would have been seen. Mrs. T—, in Forsyth street, a lady of a highly nervous temperament, became *enceinte*. During the early months of pregnancy, she was very desponding ; but after quickening, she made up her mind from the uncommon degree of motion felt, that it was not a child within her, but *a snake*. This singular idea was constantly before her, and

she expressed herself of the same opinion during labour. In due time, the child was born, it was perfect and healthy, and its weight eleven pounds and three quarters.]

To conclude the whole matter; I would ask, why should we be surprised at some irregularities on the skin, and other parts of the human body, since we see the same thing occurring daily throughout the animal and vegetable world? They have their moles, their discolorations, their excrescences, their unnatural shapes, which resemble animals and other bodies, which it certainly would not be very philosophical to ascribe to any effort of the imagination!*

* The following illustration of this point, is from the *Gentleman's Magazine*, for October 1764; and is contained in a Paper, entitled, A Letter from an eminent Physician to a Married Lady:—

"Those who have been attentive to their poultry will inform you that chickens are as liable to a preternatural structure of their organs as children. Now the egg in order to be hatched is placed under the hen, the heat of whose body gives motion to the fluids, which nourishes the chick, till it becomes sufficiently strong to break the shell, when it is produced with a claw extraordinary, or any other preternatural appearance to which chickens are liable. Now, in this case, the extraordinary claw, if we take this instance for our argument, must either have been formed in the moment of conception, or have been added at some period afterward, when we suppose the hen to have been under the influence of some powerful imagination. If you grant that the chick was originally formed in this shape, it follows, from the rules of analogy, that all preternatural births have the same cause. If not, the fancy of the hen must have operated through the shell to work the effect. I flatter myself that this is too marvellous and absurd

I trust enough has been said to satisfy the reader upon this subject ; and shall only recall attention to the following points :—

First. That a disappointed longing cannot be in any degree more injurious during pregnancy than at any other time. It might, indeed, nay, it very often does, occasion sickness at the stomach, a temporary loss of appetite, and sometimes vomiting ; but here the evil ceases.

Secondly. That while it is not denied that marks and deformities sometimes happen, yet they are to be accounted for in a much more scientific and natural manner, than by the influence of the mother's imagination ; and,

Thirdly. That they cannot be produced by the power of the imagination of the mother inasmuch as there is no nervous communication whatever between the parent and offspring ; and, therefore, that any alarm or fright which a lady might accidentally meet with during her pregnancy, can in no way affect the sym-

a notion to gain much credit from a woman of good sense. If, however, you still have a secret persuasion that the hen may, (in some wonderful manner, you know not how,) while she is sitting, affect the chick or the egg, so as to alter its frame, know for a certainty that eggs hatched in dung-hills, stoves, and ovens, produce as many monstrous births as those whose which are hatched by hens ; which, I should imagine, proves irrefragably that the chick is produced in the very shape in which it was formed."

This illustration at least, seems to show how entirely unphilosophical and absurd are the views entertained on the subject before us.

metry of her little one—although if her own health be seriously affected, the nutrition and health of the child must more or less suffer.

LECT. II.—OF THE SUPPOSED NECESSITY OF AN INCREASED SUPPLY OF NOURISHMENT DURING PREGNANCY.

It is presumed by some, that, during pregnancy, a larger proportion of food is necessary for a female than at any other time, the support and nourishment of the child demanding the extra supply. This is a great mistake, and, when acted upon, is injurious to the health of both mother and offspring. Its origin, no doubt, is simply this: if a female ordinarily only takes food sufficient to nourish her own system, surely, it is said, when she is pregnant, the extra demand made for giving support to another must require an extra supply of nourishment. This conclusion, though it appears at first reasonable enough, will, upon examination, be found fallacious. It is sufficient for me to remark, that we habitually take more food than is strictly required for the demands of the body; we therefore daily make more blood than is really wanted for its support: a superfluity amply sufficient for the nourishment of the child is thus furnished—for a very small quantity is requisite—without the mother, on the one hand, feeling the demand to be op-

pressive, and, on the other, without a freer indulgence of food being necessary to provide it. Nature herself corroborates this opinion ; indeed, she solicits a reduction in the quantity of support, rather than asks an increase of it ; for almost the very first evidence of pregnancy is the morning sickness, which would seem to declare, that the system requires reduction rather than increase, or why should this subduing process be instituted ? The consequences, too, which inevitably follow the free indulgence of a capricious, and what will afterward grow into a voracious, appetite, decidedly favour this opinion ; for the severest and most trying cases of indigestion are by these means induced, the general health of the female disturbed, and more or less impaired, and through it the growth and vigour of the child ; so that the means intended for its good become a source of direct injury. A stronger proof of the fallacy of this error is not necessary. A female, then, should guard against this opinion influencing her conduct during pregnancy.

If the appetite in the earlier months, from the presence of morning sickness, is variable and capricious, let her not be persuaded to humour and feed its waywardness from the belief that it is necessary so to do ; for, if she does, she may depend upon it, from such indulgence, it will soon require a larger and more ample supply than is compatible with her own health or that of her little one.

If the general health before pregnancy was delicate and feeble, and, as a consequence of this state, becomes invigorated, and the powers of digestion increase, a larger supply of nourishment is demanded, and may be met in such case without fear; for instead of being injurious it will be useful. If, however, as in the majority of cases, the health is in no way interfered with, and the appetite as good as usual, it is not advisable that any essential difference should be made in the *diet*; it is not called *for*, and, either way would be attended with disadvantage.

During the latter period of pregnancy, if, although in the enjoyment of health, a dislike to animal food of every kind, and under every form, is experienced, and if a female prevailed upon to eat it incautiously is sensible of much inconvenience, and she prefers vegetables and fruit, etc., which she finds may be eaten without prejudice, let her adopt such a diet; only I would impress upon her mind, that she should make the attempt to take a moderate quantity of fresh meat, or game, once in the four-and-twenty hours.

Lastly, a female, toward the conclusion of pregnancy, should be particularly careful not to be persuaded to eat in proportion of two persons, for it may not only bring on vomiting, heartburn, constipation, etc., but will contribute, from the accumulation of impurities in the lower bowels, to the difficulties of labour.

SECT. III.—OF THE SUPPOSED NECESSITY OF REFRAINING FROM EXERCISE AT THE COMMENCEMENT, AND THE BENEFICIAL INFLUENCE OF ITS EMPLOYMFNT AT THE CONCLUSION OF PREGNANCY.

There is no doubt that in some cases, in the early months of pregnancy, great and continued care is not only useful but absolutely necessary, in order to prevent miscarriage; but, that women should be encouraged to live more indolently, exercise being thought improper, unless toward the conclusion of pregnancy, when it is supposed to procure a more favourable delivery, is an error, equally injurious to mother and offspring. The fact is, a directly contrary method of proceeding is the most eligible and proper: exercise in the early months, gradually seeking a state of repose as the period of confinement approaches.

During the *first six or seven* months, frequent and gentle exercise in the open air, and domestic occupations, which require moderate exertion, are exceedingly desirable; both have a beneficial influence on the health of the mother, and, through her, upon the child. The former invigorates health, the latter contributes, by its regular return, and succession of duties, to employ her time, and thus ensures that ease and serenity of mind so essential to her happiness. On the other hand, excessive

effeminacy is highly injurious. The female whose time is spent in indolence, continually reclining on a softly-cushioned sofa, in the unwholesome atmosphere of an overheated apartment, who never breathes the fresh and pure air of heaven, but is fearful of even putting her foot to the ground, and who yet, perhaps, at the same time indulges pretty freely an immoderate appetite, under such circumstances is not likely to preserve her health, much less to improve it; in fact, it must suffer serious injury. Unfortunately, the evil will not stop here, for, by such improper and injudicious conduct, the nutrition and growth of the child must, as a natural consequence, be much interfered with, and when born, it will be feeble, perhaps emaciated, and will be reared with difficulty.

During the *last few weeks* exercise should still be taken in the open air; but as walking with some, is now attended with inconvenience, and so quickly with fatigue, that it is injurious instead of useful, exercise in a convenient and easy carriage becomes indispensable. Domestic duties must be almost altogether given up; and the recumbent position ought to be resorted to for at least two or three hours in the course of the day. And it should never be forgotten, that, throughout the whole period of pregnancy, every kind of agitating exercise, such as riding in a carriage with rapidity on uneven roads, dancing much and frequently, lifting or carrying heavy weights, moving

furniture, making beds, &c., ought to be avoided ; in short, all masculine and fatiguing employments whatever.

SECT. IV.—OF THE SUPPOSED NECESSITY OF LOSING BLOOD DURING THE PERIOD OF PREGNANCY.

This is an error which prevails to a very great extent, but among the lower class of society principally. Some poor women, as regularly as they become pregnant, after the second or third month, request to be bled. They make a point of this, because they are impressed with the idea that pregnancy demands it. It is a remedy, however, which ought to be resorted to with the greatest precaution ; and, so far from pregnancy demanding it as a necessary consequence, *it is most erroneous* ; for I have known several delicate and weakly women, who, by the advice of their friends, regularly submitting to be bled, as regularly have miscarried, and who, on again becoming pregnant, warned of the mischief resulting from such practice, have avoided it, and become the mothers of healthy children.

That bleeding is sometimes useful, and even loudly called for, there can be no question ; but such indiscriminate use of it, and solely because pregnancy has taken place, is an error productive

of manifest injury. And it is a prejudice which is perhaps more seriously mischievous to the child than the mother; for, if it does not cause its miscarriage, it will sometimes, in a weak and delicate woman, decidedly affect the stamina of the little one. So essential and important are certain observances of the parent during pregnancy, that health and vigour may be imparted to her offspring.

Such are the errors connected with pregnancy, which I have thought it might be useful thus briefly to notice. I have known them to be a source of much mental distress and physical suffering; and, if these few observations expunge them from that list of evils, always supposed by many as necessarily connected with the pregnant state, I shall exceedingly rejoice, convinced that it is a process which ought not to be regarded with fear and trembling, although it certainly demands a little more than ordinary prudence and care. For it must never be forgotten, that on the judicious conduct of the mother, while pregnant, a vigorous constitution on the part of the child much depends; and to her neglect, a feeble frame may in some measure, be attributed; for, like fruit of every other kind, the child in the womb requires a certain amount of care, for its preservation and perfection.

It would be well, therefore, on every account, that a female should engage her future medical at-

tendant *early*: she will be able to seek his direction and guidance in every doubt that may arise, and, confiding her fears and anxieties to him, will derive, from his experience and knowledge, that rational and kindly explanation of her difficulties which may instantly dispel them.

SECT. V.—ON THE SUPPOSED IMPORTANCE OF GRATIFYING
“LONGINGS” FOR PARTICULAR ARTICLES OF FOOD.

In reference to the *longings* of pregnant women for extraordinary articles of food, &c., it may be useful to make a few additional remarks. These cases, though by no means so common in the present day as formerly, occasionally fall under the notice of medical men. They are doubtless, in many instances, the mere wilful fancies of the individual, and nothing more; in other cases, however, they are the result of actual disease, and disease, too, rather of the brain than of the stomach, and they then demand careful and prudent management. For although, as before stated, an ungratified wish cannot impress an image of the thing longed for upon the child’s body, still there is abundant evidence to prove that the indulgence by the mother in luxurious and unwholesome articles of diet, not only injures her health, but seriously interferes with the growth and

vigor of her offspring.* These cases require of course medical superintendence, but the treatment will be of little avail unless the views and wishes of the physician are seconded by the self-control of the patient, aided by the vigorous efforts of the friends of the party. Unfortunately, the individuals most liable to this disease are those who are constitutionally nervous, irritable, and delicate; who have always been accustomed to have their wishes gratified, and who all their lives have had

* Books abound in curious statements connected with this subject. I insert two cases only, and these well authenticated, the first to show the injurious consequences which sometimes ensue to the mother, and the other to the child.

"We formerly attended a lady with several children, who was in the constant habit of eating chalk during her whole time of pregnancy; she used it in such excessive quantities as to render the bowels almost useless. We have known her many times not to have an evacuation for ten and twelve days together, and then only procured by enemata; and the stools were literally nothing but chalk. Her calculation, we well remember, was *three half pecks* for each pregnancy. She became as white nearly as the substance itself, and it eventually destroyed her, by deranging her stomach so much that it would retain nothing whatever upon it." *Deweese, Comp. of Midwifery*, p. 113.

"A young woman, married to a gingerbread maker, took a fancy, during her first pregnancy, to chew ginger. The quantity of this spice which she thus consumed was estimated at several pounds. She went her full time and had a favorable labor, but the child was small and meager; its skin was discolored and rough, much resembling the surfuraceous desquamation that takes place after scarlatina. The child continued in an ill state of health for several weeks, and then died. She had several children afterward, all healthy and vigorous. The inclination for ginger only prevailed with her first infant." *Merriman's Synopsis*, p. 321.

little else to think about — but themselves. Hence the cure is rendered the more difficult. These capricious appetites and fancies, however, must be firmly resisted, and far easier of accomplishment will this be if done at the onset of the disease ; for indulgence only increases desire, and every renewal of the gratification only aggravates the disease. Where this complaint has been of long standing, the powers of the stomach will necessarily have become much weakened, and a careful attention to diet will be demanded ; the mildest and most easily digested food alone ought to be taken. Fresh air and exercise should be daily obtained, as well as all other measures resorted to which contribute to the promotion of the general health ; but one of the principal points requiring the attention of the friends is to secure the healthful employment of the mind of the patient.

SECT. VI.—OF ERRORS IN DRESS.

Great errors in dress are sometimes committed by young women when they become pregnant for the first time. They do not accommodate their dress to their new situation, desirous (from mistaken feelings of delicacy) to conceal the fact from observation as long as possible. This, however, is a great error, and sometimes productive of serious consequences both to mother and offspring.

Some women err in the same way, but have not the same apology to offer for their folly. I refer to those women who allow fashion to get the better of their judgment, and incase themselves in the tightly laced corset, to preserve their figure.

In both cases the effects are the same. For months together the chest and abdomen are subjected to constant and forcible compression, and that during a period when nature is daily requiring more and more room for the gradual development of the child ; and thus the healthy performance of the various functions of the organs of the mother's system (liver, stomach, and bowels, heart and lungs, &c.) is interrupted, and the regular and healthy nourishment of the infant is seriously interfered with. Hence the functional disorders with which such women are so grievously distressed during pregnancy, and hence also the reason why they give birth to such delicate, emaciated, and puny children. Not unfrequently this evil so deranges the general system, as to cause miscarriage at an earlier or later period.

Tight lacing is productive of another evil. The glandular structure of the breasts is sometimes so injured by it, and the nipple so compressed, as to render suckling a very difficult matter, or altogether impracticable. The young wife, therefore, should take every precaution, when pregnant, to avoid everything that would interfere with her becoming a nurse, and all pressure, therefore, upon

the breasts, particularly upon the nipple, should be guarded against ; and during the last few weeks of pregnancy the latter should be prepared for sucking in the manner directed hereafter.

The corsets worn during pregnancy should have laceings at each side, and over each bosom, so that they may be loosened or otherwise at pleasure ; and as pregnancy advances the unyielding steel blades so commonly used should be removed, and thin whalebone substituted. *Due support* will thus be obtained, and all mischievous compression avoided.

While speaking upon the subject of dress in the pregnant state, I would observe, that while *compression* of the abdomen is so injurious, its proper and due *support* will be found most advisable by those women who have had many children, or borne but a few in quick succession, and in whom the abdominal muscles have in consequence lost their power. Artificial aid, and of the kind alluded to in the Chapter on the Diseases of Pregnancy, ought here to be resorted to after the fourth month.

CHAPTER II.

OF THE MODE BY WHICH PREGNANCY MAY BE DETERMINED.

THERE are certain signs which a female is taught to regard as essential evidences of pregnancy ; and it is supposed by most, if not by all women, that their presence is absolutely necessary to the existence of this state. In reference to one or two of these signs, this is far from the fact ; for they are not unfrequently absent, although pregnancy exist, and the remainder may be present, although pregnancy be absent. Many a female, I am confident, has from this very circumstance experienced much difficulty in attaining certainty as to her state, and suffered months of anxiety and doubt. This has arisen from a want of those clear notions, and that precise information, which a question so important demands.

The object of this chapter is to remove this difficulty, by presenting a short account of those symptoms of conception which the female may herself observe, and to point out to what extent they

may be relied on. It will be necessary to notice only *four* of the signs or symptoms of pregnancy, and they may be considered in the order in which they usually arise ; that is, ceasing to be unwell ; morning sickness ; shooting pains through, enlargement of, and other changes of the breast ; and, lastly, quickening.

SECT. I.—CEASING TO BE UNWELL.

The first symptom of pregnancy is the omission of that regular monthly return, which, in female phraseology, would be described as “ceasing to be unwell ;” and it may be adopted as a general rule, that, in a healthy woman, whose menstruation has been established, and continued regular, and who is not nursing, “conception is followed by a suppression of the menstrual discharge at the next return of its period.” Thus, a female may have been pregnant a week or two already ; but she is not aware of it, till that period of the month arrives when she is accustomed to menstruate, and then, when she expects to be unwell, she finds that she is not so.

Now this symptom, as a general rule, admits of four exceptions :—

First. A young female shall never have menstruated and yet conceive.

Secondly. A mother shall conceive while she is nursing, and not menstruating.

Thirdly. A female shall conceive, and yet be unwell during the first three, four, or more months of pregnancy.

Fourthly, and lastly. Occasionally conception takes place late in life, after menstruation has apparently ceased for ever.

First exception.—Many cases are on record proving this point. I have met with only two cases; one quite a girl, not having arrived at her seventeenth year, and yet was in her sixth month of pregnancy when she applied for a letter for the Finsbury Midwifery Institution; the other was in her nineteenth year. Menstruation was, subsequent to confinement, established in the first; with the result of the latter I am not acquainted.*

* A remarkable case is mentioned by Morgagni:—"I was acquainted," he says, "with a maiden of a noble family, who married before menstruation took place, though the menses had been expected for some years; nevertheless she became exceedingly fruitful. We were the less surprised at this circumstance because the same thing had happened to her mother."

Frank attended a patient who gave birth to three children without ever having been unwell. Capuron, also, refers to several cases of this description, and Foderé assures us of the fact. A case of the kind occurred too in the practice of Mr. Montgomery. Low likewise mentions a similar instance. Sir E. Moore relates the case of a young woman who married before she was seventeen, and never having menstruated, became pregnant, and four months after delivery was pregnant a second time; the same thing occurred again, and after the third pregnancy she menstruated.

Although pregnancy under such circumstances is not of frequent occurrence, still it does now and then take place. A knowledge of the fact may therefore prove useful.

Second exception.—It is scarcely necessary to advert to the well-known fact, that a woman may conceive while she is nursing, without any previous return of the monthly discharge, except to expose the popular error, “that a female will not become pregnant during lactation.” This is very far from being the case. Poor women are much in the habit of nursing their infants eighteen months, two years, and even two years and a half, in order to protect themselves, as they imagine, from becoming pregnant; and many a poor creature have I seen with exhausted frame and disordered general health, arising from protracted nursing, pursued alone from this mistaken notion.

ted for the first time, continued to do so for several periods, and became pregnant again.

It should be remembered, however, that some women are very irregular in the return of their menstrual periods—having them prolonged much beyond the usual interval. Mr. Montgomery once attended an unmarried woman of forty, who assured him that returns of the menses, had frequently been delayed for more than six months without causing ill health. Instances of menstrual suppression for shorter periods are frequent. Zacchias mentions that he attended a patient who used to menstruate regularly, but who never conceived until the discharge had been suppressed for three or four months previously. Mauriceau relates a somewhat similar case, and remarks that cases of this character give rise to the suspicion of protracted pregnancy.

I have large opportunities of investigating this, as well as the several points touched upon in this chapter. On an average, between forty and fifty poor women call upon me every month, with midwifery letters for attendance in their confinement; and the result of my inquiries upon the present question has led me to believe, that more than one third of these women have conceived at least once while nursing, and very many of them oftener.*

Mrs. M——, æstat. 30, married six years. Became pregnant three months after her marriage. Having suckled this child for more than two years, became pregnant a second time. This last died in three weeks, and immediately after she proved pregnant for the third time. The third child she brought this morning, (being out of health,) and assured me that she had not seen anything since she first conceived, that is, three months after her marriage, and six years from the present time.

Mrs. W——, æstat. 25, married five years. Has not been unwell since she first fell in the family way: is now pregnant with a third child, having hitherto fallen pregnant always while nursing.

Many other cases illustrative of this fact I might insert, but these suffice to prove the exception.†

Third exception.—That a female should become

* The following cases, as well as others, are extracted from my Note Book.

† Mr. Robertson of Manchester inquired minutely into the result of one hundred and sixty cases, in which he found that eighty-one women had become pregnant once or oftener during suckling.

e^gnant, and yet be unwell during the first three, four or more months of pregnancy, may appear an extraordinary statement; but it is a fact, that the menstrual discharge sometimes continues in its usual regularity for two, three, or more months after conception, and without any dangerous consequences.

It has been asserted, as an objection, that this discharge is not truly menstruation; but the discussion of that question does not concern us here. We have only to consider, whether there does not frequently, during pregnancy, take place a discharge, so closely resembling menstruation in its periods, quantity, duration, and appearance, that neither the female herself nor her medical adviser shall be able to detect any difference between them; and of this I have no doubt.

It may occur *once* only after conception, either in diminished quantity or more profuse than usual. It may thus give rise to miscalculation as to the expected time of confinement.

It may continue in its usual regularity for *two or three months*. The following instance of a patient I attended illustrates the fact of its going on to the period of quickening:—

Mrs. R——, ætat. 27, married eight years. Was first unwell when eighteen years of age, and continued to be so regularly until she became pregnant, two years from the time of her marriage. She suckled her first child for eleven months: soon af-

ter became unwell, and continued so until she quickened with her second child; a circumstance which she had not the slightest suspicion of, for there was no perceptible difference either in the quantity or appearance of the monthly discharge. During the remaining months of gestation she did not see anything; she afterward suckled her little one for ten months; and then was obliged to wean the child, having an attack of the cholera. She continued from this time regular for two years; but meeting with a fall, much to her surprise, two or three days after, miscarried of a four months' child. She is now pregnant again, having been regular every month till she quickened, and expects to be confined, February, 1836.

In this case then, the female was unwell in two pregnancies till the period of quickening; and in the other for four months, when miscarriage took place from accident.

And lastly, it may occur through the *whole* period of pregnancy.

Mrs. F—, is now pregnant for the third time. In her first pregnancy the monthly returns appeared for three periods, regular as to time, and in quantity and appearance as heretofore. During the second child-bearing, at every month till confinement. During the third—her present pregnancy—for three months only. This patient is always unwell while nursing.

Mrs. J—, now in her eighth pregnancy. Was unwell every month throughout the first six pregnancies; but the quantity always slightly diminished. In the seventh, the same circumstance occurred; but premature labour was this time in-

*

ced, between the sixth and seventh months, by a fall. During the present pregnancy she has not seen anything. Is always unwell while suckling.

Mrs. P—, is in her fourth pregnancy. In the first three was unwell, at her regular periods, to the time of confinement. The discharge the same in quantity but rather lighter appearance. Has been unwell in her present pregnancy every month up to the present time.*

The following case proves how important it is that this fact should be generally known; for up to a very late period, some medical men have even denied the possibility of this occurrence.

The case I refer to was that of a young lady, privately married, the gradual enlargement of whose abdomen was decided by her medical attendant to arise from dropsy; for, although she had most of the symptoms of pregnancy, and the medical man was aware she had been married eight months, still, as *she continued to menstruate*, he declared it impossible that she could be pregnant. Tapping was proposed; and, except that her general health suffered much at this time, the operation would have been performed. The delay saved the patient such unfortunate and mistaken treatment—it might have proved fatal in its results—and she shortly gave birth to a living and healthy male child.

Fourth exception.—That women late in life have

* Dr. Heberden was acquainted with a lady who never ceased to have regular returns of the menses during four pregnancies, quite to the time of her delivery.—*Heberden Commentaries.*

This opinion is confirmed by Gardien, Dewees, Hamilton, Desormeaux, Puzos, Francis, &c.

conceived after menstruation had apparently ceased for ever, the following cases prove :—

In September, 1834, I was called to the assistance of a female in labour in her forty-ninth year. She had not been pregnant for twelve years, and supposed she had ceased to menstruate two years previous to that time. She did well, and never afterward saw anything.

Mrs. B——, ætat. 39. Has been married eighteen years, commenced to be unwell very early in life. Has had three children; the last pregnancy seven years since. Is now again pregnant, her menses having left her sixteen weeks prior to conception; before which, she had been very irregular, and supposed she had ceased to be unwell for ever.

Other cases of a similar nature are on record. There can be no doubt they are authentic; but at the same time it must be acknowledged that a female is not unlikely to be deceived, by the irregularity which attends the returns of this discharge, late in life. It so happens, too, that just before the change of life takes place, there appears in the constitution of some females a great disposition to pregnancy; so that many who have ceased to bear children for years, or have been hitherto barren through the whole of their married existence, at this time, to the surprise of their friends and themselves, become pregnant.*

* "A woman came to me one morning," says Dr. Gooch, "with a note from a medical man, containing the following statement: The patient's age was forty-two; she had been married twenty-two years without ever being pregnant. About seven months ago

A knowledge of these facts must be useful, as they will tend to allay apprehension at what might be supposed disease, both by the mother and by the hitherto childless woman

A female must not forget, however, that she may mistake her condition, and that such mistakes are not at all unlikely to arise from the circumstance that the symptoms which naturally accompany the *cessation* of menstruation, much resemble those of pregnancy. She passes over the menstrual period;

she had ceased to menstruate; a few months afterward the abdomen began to enlarge, and was now nearly equal to that of full pregnancy. For several months the practitioner had been using various means for reducing the tumour, but in vain. I examined the case, pronounced her pregnant, and seven weeks afterward she brought forth a child at the full time."

Dr. Montgomery says: "A lady in her forty-third year, who was married to her present husband twenty years ago, remained without any promise of offspring until within the last few months; but having missed her menstruation in September last, and finding her size increasing, I was requested to see her in January, when she exhibited evident symptoms of pregnancy. She was subsequently delivered of a healthy boy, after a natural labour of about four hours."

Mosse, one of the medical officers of the Dublin Lying-in-Hospital in 1775, states, that eighty-four of the women delivered in the Institution under his superintendence were between the ages of forty-one and fifty-four; four of these were in the fifty-first year, and one in her fifty-fourth.

In May, 1816, Mrs. Ashley, wife of John Ashley, grazier, of Frisby, at the age of fifty-four years was delivered of two female children.

The succession to an estate was disputed in France because the mother was fifty-eight years old when the child was born. The decision was in favour of the fact.

—she is struck with this. Other symptoms are soon manifested: the size increases—the breasts even become swollen and painful—the stomach disordered, and the appetite capricious;—flatulence collects in the intestines; and while on this account the size still increases, the air moving about the bowels gives an inward sensation which is mistaken by the female for the plunging of the child. Time alone, or the investigation of the medical attendant, detects the mistake; and the symptoms are then to be easily removed by the exhibition of carminative and purgative medicines, the use of active exercise, and bandaging the distended abdomen.

It must be remembered, also, that *suppression* of the monthly return may arise from a variety of causes, altogether independent of conception. Every female is aware, that exposure to cold, just before the expected period, is a frequent cause. Different forms of disease, hardships, or mental emotions, may produce the same result. It does not follow, therefore, because a woman ceases to menstruate, she *must* be pregnant; which naturally presents this inquiry: what dependance, then, is to be placed upon the omission of menstruation as a symptom or sign of pregnancy?

When a female ceases to be unwell, and experiences other symptoms of pregnancy, she must consider her situation as yet uncertain, because these signs are common to disease as well as pregnancy.

But if toward the third month, while the supp^{es}sion continues, she recovers her health, and if her appetite and colour return, she needs no better proof of pregnancy; for under other circumstances her health would remain impaired, and even become worse.

SECT. II.—MORNING SICKNESS.

Soon after conception, the stomach often becomes affected with what is called “morning sickness.” On first awaking, the female feels as well as usual; but on rising from her bed qualmishness begins, and perhaps while in the act of dressing, retching takes place.

This symptom may occur almost immediately after conception; but it most frequently commences for the first time between two and three weeks after. Now and then it is experienced only the last six weeks or two months of pregnancy, when it is attended, generally, with much distress and discomfort. And lastly, it is not unfrequently absent altogether.

It continues, more or less, during the first half of pregnancy, and subsides about the time when the movements of the child begin to be felt.

Irritability of the stomach, however, may arise from a variety of causes totally independent of

pregnancy, and connected with disease or disordered function. Of what avail then, it will be asked, is this symptom, as a sign of pregnancy? It is so far available:—

The nausea and vomiting of pregnancy is not accompanied by any other symptom of ill health; but on the contrary, the patient feels as well as ever in other respects, and perchance takes her meals with as much appetite and relish as formerly; but while doing so, or immediately after, she feels suddenly sick, and has hardly time to retire, when she rejects the whole contents of her stomach, and very shortly after is quite well again. Not so with sickness arising from disease, or disordered condition of the stomach.

SECT. III.—SHOOTING PAINS THROUGH—ENLARGEMENT
OF—AND OTHER CHANGES OF THE BREAST.

When two months of pregnancy have been completed, an uneasy sensation of throbbing and stretching fulness are experienced, accompanied with tingling about the middle of the breast, centring in the nipple. A sensible alteration in their appearance soon follows: they grow larger and more firm. The nipple becomes more prominent, and the circle around its base altered in colour and structure, constituting what is called “the areola.” And as pregnancy advances, milk is secreted.

The period of gestation at which these changes may occur, as well as the degree in which they become manifested, varies very much. Sometimes, with the exception of the secretion of milk, they are recognised very soon after conception ;—in other instances, particularly in females of a weakly and delicate constitution, they are hardly perceptible until pregnancy is far advanced, or even drawing toward its termination.

Enlargement of the Breast.—The changes in the form and size of the breast may be the result of causes unconnected with pregnancy. They may enlarge in consequence of marriage, from the individual becoming stout and fat, or from accidental suppression of the monthly return. There are, however, these differences : enlargement from pregnancy may in general be distinguished from that produced merely from fat, by the greater firmness of the breast, and its knotty uneven feeling—it is heavier ; and the tension and enlargement from suppressed menstruation, by its subsiding in two or three days, whereas that caused by pregnancy continues to increase. Nevertheless, the dependence which may be placed upon the enlargement of the breast only, as an evidence of pregnancy, is not very great, and considered alone, but a doubtful sign.

The Nipple.—Not so the changes which take place in the nipple, and around its base. These alterations, if present, are of the utmost value, as

an evidence of pregnancy. The changes referred to are these :—

About the sixth or seventh week after conception has taken place, if the nipple be examined, it will be found becoming turgid and prominent, and a circle forming around its base, of a colour deeper in its shade than rose or flesh-colour, slightly tinged with a yellowish or brownish hue, and here and there upon its surface will be seen little prominent points, from about ten to twenty in number. In the progress of the next six or seven weeks, these changes are fully developed ; the nipple being more prominent and turgid than ever : the circle around it of larger dimensions, of an extent of about an inch or an inch and a half ; the skin being soft, bedewed with a slight degree of moisture, frequently staining the linen in contact with it ; the little prominences of larger size, from the sixteenth to the twelfth of an inch perhaps ; and the colour of the whole very much deepened, but always modified by the complexion of the individual, being darker in persons with black hair, dark eyes, and sallow skins, than in those of fair hair, light-coloured eyes, and delicate complexions.

Such are the essential characteristics of the true areola, the result of pregnancy, and I believe, of that condition only.

This, then, is a most valuable sign ; but unfortunately, it is frequently absent ; and how often it

is present, although I have examined many hundred cases for it, I cannot determine, as unfortunately no note was made upon this point. It should also be observed, that both in dark and fair women, the change of colour, without the other appearances, may be present, and yet pregnancy exist; and I have also seen frequently the dark circle alone, where pregnancy did not exist; but I never saw an instance where these prominences were truly developed, without the presence of pregnancy.

This fact has been more particularly noticed of late years by an eminent physician-accoucheur, and the attention of the author has, in consequence, been much directed to it; and, as a striking illustration of its truth, he may mention, that called upon very recently to visit one of the Institution patients the third day after her delivery, and having occasion to examine the breast, I pointed out to the gentleman in attendance the presence of these little prominences around the base of the nipple; upon which the patient, to my great surprise, immediately observed, "Ah, sir, I always know when I am pregnant by them, for they appear about ten days or a fortnight after its occurrence, and subsequent to delivery diminish gradually, as my milk leaves me."

It has occurred to me during the past year to be consulted in five cases of doubtful pregnancy. In two of them, circumstances forbade the probability of its occurrence; but in both the true areola

was distinctly and fully developed. It decided my opinion; and the result proved its correctness: both became mothers. *Two others* had made themselves patients of the Lying-in-Institution, having obtained letters for attendance from governors of the charity, and upon which was marked, by their own calculation, the month of their expected confinement. But I was led to believe, from observing two or three symptoms, that pregnancy did not exist.

Their cases were examined, and at last the breast: in both the true areola was wanting; the review of symptoms decided all doubts. Had, however, the true areola been present in either, it would at once have reversed, instead of confirming my first suspicions.

The *fifth* was pregnant, but the true areola was wanting; and I was obliged to refer to those signs which can alone be recognised by a medical man.

The absence then of this sign, except in combination with other circumstances, proves nothing, but if present, I believe it conclusive.

The Presence of Milk.—With regard to the presence of milk in the breasts, as this is a symptom which may arise, and does very generally, in the latter months of gestation alone, when, the existence of pregnancy has been long determined, it is only mentioned here to refute the popular error, that “the presence of milk in the breasts is an infallible proof of pregnancy.” It is no such thing

and many well-recorded instances could be brought forward to prove the possibility of its formation under circumstances totally independent of pregnancy.

Belloc speaks of a servant girl, who being obliged to have sleeping with her an infant who was being weaned, and which by its crying disturbed her rest, bethought her of giving it her breast to appease its clamour; and the result was that in a short time she had milk enough to satisfy the child.*

The following case is related by Mr. George Semple: Mrs. B——, wife of John Breward, Simpson Green, near Idle, aged forty-nine, the mother of nine children, the youngest of whom is twelve years old, lost a daughter-in-law about a year ago, who died in about a fortnight after giving birth to her first child. On her death, Mrs. B. took charge of the infant, a little puny sickly baby. The child was so fretful and uneasy, that Mrs. B. after many sleepless nights, was induced to permit the child to take her nipple into its mouth. In the course of from thirty to thirty-six hours she felt very unwell; her breasts became extremely painful, considerably increased in size, and soon after, to her utter astonishment, milk was secreted, and poured forth in the same abundance as on former occasions, after the birth of her own children. The

* *Cours de Méd. Légale*, p. 52.

child, now a year old, is a fine, thriving, healthy girl, and only a few days ago I saw her eagerly engaged in obtaining an apparently abundant supply of healthy nourishment, from the same fountain which, nearly twenty years ago, poured forth its resources for the support of her father."*

* North of Engl. Med. and Surg. Journ., vol. i. p. 230.

That the presence of milk in the female breast shall take place independent of pregnancy, from the above and other recorded facts, there can be no doubt; but the following beautiful exemplification of its formation in that of the *male*, places the question in a still stronger light. This interesting fact is cited from Captain Franklin's narrative of his journey to the shores of the Polar Sea.

"A young Chipewyan had separated from the rest of his band, for the purpose of entrenching beaver, when his wife, who was his sole companion, and in her first pregnancy, was seized with her pains of labour. She died on the third day, after giving birth to a boy. The husband was inconsolable, and vowed in his anguish, never to take another woman to wife; but his grief was soon in some degree absorbed in anxiety for the fate of his infant son. To preserve its life he descended to the office of a nurse, so degrading in the eyes a of Chipewyan, as partaking of the duties of a woman. He swaddled it in soft moss, fed it with broth made from the flesh of the deer; and to still its cries, applied it to his breast, praying earnestly to the Great Master of Life to assist his endeavours. The force of the powerful passion by which he was actuated produced the same effect in his case as it has done in some others which are recorded: a flow of milk actually took place from his breast. He succeeded in rearing his child, taught him to be a hunter, and when he attained the age of manhood, chose him a wife from the tribe. The old man kept his vow in never taking a wife for himself, but he delighted in tending his son's children; and when his daughter-in-law used to interfere, saying, that it was not the occupation of a man, he was wont to reply, that he had promised the Great Master of Life, if his child was spared, never

SECT. IV.—QUICKENING.

There is only one other symptom which I think is useful to notice, that is quickening; by which is meant, the first sensation experienced by the mother of the *life* of the child within her womb.

The first time this motion of the child occurs, the sensation is like that of the fluttering of a bird within her, and so sudden that she frequently faints, or falls into an hysterical paroxysm. A day or two passes by when it recurs. It afterward increases both in frequency and degree, until the movements of the child are fully recognised.

It is proper that a female should be informed that the *period* when quickening takes place is very uncertain; for an impression is popularly prevalent that it always occurs *exactly* at the end of four calendar months and a half. This is not the case; it varies in different women, and in the same women during different pregnancies, as the following one or two instances will prove:—

to be proud like the other Indians. Our informant, Mr. Wenkel (one of the Association) added, that he had often seen this Indian in his old age, and that his left breast, even then, retained the unusual size it had acquired in his occupation of nurse." p. 157.

Man possesses the same organization as woman for secreting and conveying milk, which enables us readily both to understand and believe in the truth of the foregoing singular statement.

Mrs. F——. Quickened with her first child at four months: quickened with the second at fourteen weeks; and is now in her third pregnancy, and reckons from the fourteenth week again.

Mrs. B——. Has had seven children, and with all felt the motion of the child for the first time at the third month.

Mrs. Mc M——. Has been several times pregnant; seldom feels movements of the child at all until the sixth month, and not strongly till the eighth.

The annexed table of the periods of quickening of 70 cases taken in the order in which they have been entered in the author's note-book, will forcibly stamp the truth of these opinions:—

- | | |
|----|-------------------------------------|
| 9 | Quickened at the 3d month. |
| 11 | Quickened at $3\frac{1}{2}$ months. |
| 21 | Quickened at the 4th month. |
| 16 | Quickened at $4\frac{1}{2}$ months. |
| 8 | Quickened at the 5th month. |
| 1 | Quickened at $5\frac{1}{2}$ months. |
| 4 | Quickened at the 6th month. |

70

In a few of these cases, for the sake of convenience, I have used round numbers, when two or three days before or after was the exact time; and for the sake of correctness, have omitted several cases, in which there was the slightest doubt in the patient's mind of the exact time.

It appears from this table, that this symptom takes place more frequently between the twelfth and sixteenth week, than before or after these periods; and that subsequent to the $4\frac{1}{2}$ and the expiration of the sixth month, it may occur in the proportion of more than one case out of every five.— Before the third month, quickening seldom arises.

This symptom may not be felt by the mother at all, and yet pregnancy exist. This is rare, but the fact is confirmed by many writers; and I have met during the last seven years with two instances, and in both the mothers gave birth to living and healthy children.

Now comes the question, how far this symptom is of value, as a sign of the pregnant state?

If it has been experienced in former pregnancies, it is invaluable, for I believe it is not to be mistaken. If it is a first pregnancy and doubtful, it removes all obscurity, provided the sensation grows stronger and stronger, until the movements of the child are distinctly felt.

Four only of the symptoms of pregnancy have been noticed, because the remainder are not recognisable, except by the accoucheur, although to him of the greatest value when pregnancy is complicated and doubtful from the presence of disease.

The nature of these symptoms have been described as plainly, and yet as briefly, as possible, because of the importance of their being clearly understood by married women.

I have also endeavoured to point out their real value as evidences of pregnancy—how they are sometimes absent in patients who are pregnant, and some of them present in those who are not so—because of the doubt and obscurity which arise from these variations.

And lastly, in bringing these observations to a conclusion, I venture to say, that if the married female will only take the trouble to make herself familiar with this little detail, she will not regret the time as lost or mispent, because it will generally guide her right, and I trust save her many moments of anxiety and discomfort.

CHAPTER III.

OF THE DISEASES OF PREGNANCY, AND HINTS FOR THEIR PREVENTION AND RELIEF.

IN describing the diseases which are incident to the whole period of pregnancy, my design is to take a general popular survey of the subject. I wish simply to communicate that kind of information, which every married and well-educated woman should certainly possess, and can usefully employ. To advance farther than this, to those points upon which the assistance of the medical adviser ought to be sought, would be on every account improper, and productive rather of evil than of good.

There is no organ in the body, with the exception of the stomach, that exercises a more extensive control over the female system than the womb. Hence, when in the condition of pregnancy, it affects, directly or indirectly, various parts of that system. The effects of pregnancy, however, vary much according to the constitution of the female.

Sometimes a very salutary change is produced, so that the individual enjoys better health during gestation than before. The delicate and frequent

ailing girl, for instance—the propriety of whose marrying was a matter of doubt among her friends—becoming pregnant, instead of realizing the apprehensions and fears of those most dear to her, will sometimes acquire new life and vigour from the altered circumstances of her condition. On the other hand, speaking generally, it is sometimes the case that harassing and painful symptoms will arise. These are designated the “diseases of pregnancy.”

SECT. I.—MORNING SICKNESS.

Nausea or vomiting, is one of the most common and distressing affections of pregnancy. It is chiefly troublesome in the earlier months of gestation, continuing until the period of quickening, when it decreases or ceases spontaneously;—or, it does not occur until the later months of pregnancy, when it subsides only upon delivery. I shall consider these states separately; and—

First, of sickness during the *earlier* months. This arises solely from sympathy with the newly commenced action, and irritable condition of the womb. This is evident from the fact, that, as the novelty of the pregnant state ceases, and the stomach becomes accustomed to it, the sickness subsides gradually, and is rarely troublesome afterward.

It occasionally commences immediately after conception; and it is a remarkable fact, that a pregnant woman scarcely ever feels sick, until she first gets upon her feet in the morning. Hence it is called the "morning sickness." She awakes refreshed and well, arises from her bed, and while dressing begins to feel qualmish. At the breakfast table she has no appetite, or if she takes anything, is shortly obliged to leave for her dressing-room, where she returns what she has taken;—or, if she has been unable to take anything, ejects a fluid, limpid, thin, and watery; and if the vomiting increases in severity, bile is thrown up at the same time. After the lapse of three or four hours, she feels quite well again, and by dinner time sits down with an appetite to her meal.

If there is merely nausea or vomiting *without the presence of bile*, it is evident that it arises solely from irritability of the stomach, and is not connected with a disordered condition of the digestive organs, which latter circumstance is not unfrequently the case. The best means that can be employed to relieve this irritable state will be found in a draught taken twice a day for several days, composed of fifteen grains of magnesia, one drachm of tincture of columba, and an ounce and a half of distilled peppermint-water.*

* I have found a Burgundy pitch plaster, the surface of which has been well sprinkled with powdered opium, an admirable applica-

Medicine sometimes is hardly called for ; and I have known a tumbler of warm chamomile tea, or even warm water only, taken immediately after nausea was felt, by inducing immediate vomiting, tranquillize the disturbed stomach, and thus abridge the morning attack. It is sometimes attended with advantage to take the chamomile tea before the female rises from her bed. I advised this with the most marked success very lately in the case of a lady who was very much reduced by the morning sickness. It had continued for several weeks, and with so much violence and straining, as to cause blood to be ejected with the fluid. In less than one week, when all other means had previously failed, the above suggestion was successful.

It frequently happens that the acidity is very great, in which case fifteen or twenty grains of magnesia should be taken in a wine-glass of milk* —or, if it is preferred, a small tumbler of soda water; but the latter must not be persevered in for any great length of time, as it will then become injurious. The presence of acidity, however, is sometimes so difficult to overcome by alkalies, that these medicines must be given up, and acid remedies employed. Lemonade may first be taken, but lemon-juice and water is still better.

tion to the pit of the stomach. In many cases the nausea has been soon relieved, and the irritability of the stomach subdued.

* A teaspoonful of pulverized prepared charcoal in a tablespoonful of limewater, is oftentimes very useful in these cases.
6

The state of the bowels must not be forgotten, and if any of the latter remedies are resorted to, the most marked benefit will be derived from a gentle dose of Epsom or Cheltenham salts every second morning, if so often necessary.*

The diet in such a case must also be carefully attended to ; but as this point will be referred to more particularly presently, it is only necessary now to say that the quantity of food taken must bear some proportion to the slightly diminished powers of the digestive functions, and that it will be well, when the sickness is very obstinate and distressing, to take no food at all for several hours after rising. If, after a few hours, the mouth is much parched, it may be moistened with a little broth, or weak beef-tea ; but let nothing more be taken for five or six hours, and it is most probable that the sickness, which has resisted all other means, will thus be relieved.

If this irritable state of the stomach is connected with a *disordered condition* of the *digestive organs*, the sickness will be accompanied with the presence of bile in the matter vomited, a furred tongue, confined or irregular action of the bowels, and occasionally with what is termed “a sick-headache.”

* Seidlitz powders with a little syrup of ginger are frequently efficient, particularly if followed by a large draught of pure water. Many who have taken the Seidlitz powders with little or no effect, would be surprised at their efficacy, if one or two tumblers of water be taken immediately afterward.

These symptoms are to be relieved by medicines which thoroughly clear out the bowels, allay the irritability of the stomach, and afterward by those which restore tone to both. But it is to be observed that the following directions are only intended to apply to those simple cases, in which, whether necessary or not, no one ever thinks of consulting their medical adviser, and for which it is certainly desirable that they should have some judicious directions, rather than be left entirely without them. If these symptoms become at all aggravated, it is requisite that they should make immediate application for professional advice.

The bowels will need in the first instance a draught composed of infusion of senna and Epsom salts—the common “black draught”—with half a drachm of the tincture of henbane in addition. This, with five grains of blue pill, most probably effects the object desired ; the bowels will be well purged, and the tongue become clean.

The next thing is to allay the irritability of the stomach, which is to be accomplished by the means already pointed out—the effervescent draught of soda, magnesia, chamomile tea, &c. ; but in connexion with this, two or three grains of the purified extract of aloes, with an equal quantity of the extract of henbane, must be taken two or three times a week, at bedtime. This will keep the tongue still clean, and the bowels in order.

After a little time, the sickness having subsided

tonic medicines may be used; and a fourth part of the following mixture, taken three times a day, will, under the present circumstances, be the best means of restoring the tone of the stomach and bowels: sulphate of quinine, six grains; diluted sulphuric acid, half a drachm; infusion of columba, five ounces and a half; simple syrup, half an ounce.

Having pointed out the means for mitigating sickness in the early months, there only remains one additional suggestion to make, and it is, that all the remedies for relief detailed may, in some cases, fail. The sickness continues most obstinate; every time the female takes food, or even sometimes when abstaining from it, she vomits; and at last, from this excessive irritability and long-continued violent action of the stomach, symptoms threatening miscarriage will manifest themselves.* There is generally in such a case, pain and a sensation of tension about the pit of the stomach, increased after every attack of sickness. If symptoms of miscarriage are not present, the application of nine or twelve leeches to the stomach, and pieces of soft linen rag well soaked with laudanum, constantly applied and renewed, will give the most decided relief. If, however, there is pain in the

* In these cases, the oil of Kreosote will be found a most valuable remedy. It is given in doses of from half a drop to one drop. This medicine, however, ought not to be used without the sanction of a medical man.

loins and hips, increasing in frequency and power, becoming at last slightly bearing down, I strongly advise the patient to consult her medical adviser, as the loss of a little blood from the arm, perfect rest in the recumbent position, and other directions which he alone can give, will in such a case be absolutely necessary, and I may add, if perseveringly acted up to by the patient herself, be certainly followed by success.

Secondly, of sickness coming on at the conclusion of pregnancy.

This arises from the distended state of the womb affecting mechanically, by its pressure, the coats of the stomach, and certain parts in its neighbourhood.

This form of vomiting but rarely occurs; for do not let me be supposed to refer to the sickness which sometimes immediately precedes, and generally accompanies, the early part of labour. I am speaking of that irritability of the stomach which may arise about the sixth, seventh, or eighth month, and from which the female has been entirely free during the previous months of gestation, and now producing vomiting of an exceedingly troublesome form.

A lady suffering from sickness thus late in pregnancy, ought to seek medical advice at once. From this cause, if severe, premature labour might be brought on, and judicious medical treatment is always decidedly necessary to mitigate this form

of sickness. The patient must lose a little blood, she must keep strictly to her sofa, and the bowels ought to be gently acted upon by small doses of Cheltenham or Epsom salts. A grain of the extract of opium may be given to allay the irritability at night, and cloths dipped in laudanum frequently applied to the pit of the stomach.

In all forms of sickness arising from pregnancy as its cause, the diet must be light, mild, and nutritious, taken in moderate quantities of three or four meals a day. It should consist of mild animal food, boiled or roasted. Chicken, white game boiled, mutton or beef roasted, are the viands most nutritious and easily digested. Stale pure bread untoasted, or pilot bread, mealy potatoes, or well-boiled rice, in moderate quantities, may be taken with animal food for dinner. A glass of port wine with warm water at the conclusion of the meal, is the best kind of beverage.

Advantage has often been derived from always taking brown bread, and Jamaica sugar in the morning's coffee. The healthy operation of the bowels has been thus promoted; although a system of regular exercise by walking, apportioned to the strength, and not continued so long as to fatigue, will generally affect this purpose, while at the same time it gives tone to the general health. Fatigue of body is sedulously to be avoided. Slow and moderate walks, exercise in an open carriage (if the patient has sufficient strength,) should be

taken daily between breakfast and dinner ; always avoiding to sit down to the latter meal tired, and therefore, probably, with a blunted appetite.*

SECT. II.—HEARTBURN.

This is a very distressing symptom, and occurs early after conception ; sometimes, however, not till after the fourth month ; and occasionally is absent altogether. It is produced by an acid forming in the stomach, which rises into the throat, and, from the sensation it occasions, is called *heartburn*.

It is a very common complaint of pregnancy ; and every female knows that she finds relief by taking a little magnesia, or chalk, or lime-water and milk, with the occasional use of magnesia ; but although these means generally mitigate this symptom, occasionally it is very severe, and almost intractable, and they fail. Under such circumstances, a draught composed of 15 grains of magnesia, 10 drops of the solution of the subcar-

* Beside the morning sickness, the period of pregnancy is often attended with another distressing symptom, described as a sinking at the pit of the stomach : the patient complains, to use a common expression, that she feels *all gone*. This feeling I have often relieved by the free use of soda water. Another remedy which I have often used, and which is by no means disagreeable, is a fresh egg, beaten up with a tumbler of milk and sweetened.

bonate of ammonia, and $1\frac{1}{2}$ ounce of mint or peppermint water, taken three times a day, and continued for three or four days, will remove the complaint.

If the bowels are confined, as is frequently the case, mild doses of Epsom or Cheltenham salts will be the best aperients. The use of these must be regulated by circumstances,—taken every second, third, or fourth day; that is, resorted to with sufficient frequency and perseverance to guard against costiveness.*

The *diet* must also in every case be strictly attended to, and regulated upon the plan already stated.

SECT. III.—COSTIVENESS.

A costive state of bowels is one of the most common, and, at the same time, troublesome, of the diseases of pregnancy. It arises partly from the increased activity which is going on in the womb, and which induces a sluggish condition of the bowels, and partly from the pressure of the now enlarged and expanded womb on the bowels themselves.

A confined state of bowels is the frequent source of many and serious evils; it therefore behoves the female to be vigilant and guard against it.

*The *Red* mixture, prepared by suspending equal parts of pulverized rhubarb and magnesia in mint water, is a favorite prescription with many.

First,—Because, as before stated, pregnancy itself predisposes to constipation.

Secondly,—Because it is much more easily prevented than removed, when, after several days, confinement, an accumulation of hardened fœces has collected in the lower bowel.

Thirdly,—Because such an accumulation may give rise to inflammation of the bowel itself, and, in the earlier months of pregnancy, to miscarriage; and,

Lastly,—Because, if a female falls into labour with her intestinal canal so loaded, it will of itself be sufficient to render, what would otherwise have been a quick, easy, and safe labour, a long, painful, and difficult one; and may be the cause also of very serious and alarming symptoms, some forty or eight-and-forty hours after her labour is over.

The first and leading symptom of this affection is a costive or more consistent state than usual of the fœcal excretions, with a less frequent call for evacuation than is customary with the individual when in health. If this is not attended to, and several days, perhaps a week, pass by without the bowels being relieved at all, pain in the head, a foul tongue, and an increased degree of fulness and tension of the abdomen are experienced. These symptoms are followed, in all probability, by thin watery evacuations, attended with pain, weight, and pressure about the lower bowel: they become frequent; and the female at last, finding that the

bowels are not only open again, but even loose, takes chalk mixture. She is not aware that this very looseness is nothing more than increased secretion of the lining membrane of the bowel, caused by the pressure of the accumulated mass of hardened faces, which it passes and leaves unmoved. The chalk mixture relieves the irritation upon which the looseness depends, but the disease is not removed, and, instead of its being a case simply of costiveness, it has now become one of constipation ; an accumulation of hardened stool is distending and irritating, by its pressure, the lower bowel and the womb, and the serious consequences before enumerated may follow.

Very often have I been consulted by a female far advanced in pregnancy, for what she supposed mere looseness of bowels, which has readily been found to originate under circumstances like these. It is of the highest importance that the patient should endeavour to guard against such a result; and without doubt she may avoid it, and regulate her bowels with great comfort to herself, through out the whole period of pregnancy, if she will only use the means.

In pointing out a plan to accomplish this desirable object, the first prescription I have to offer is by far the most valuable,—“prevention is more easy than cure.”* If the bowels are sluggish to-

* In these cases medicine is not always necessary. Much benefit may be derived from the use of a laxative diet. Brown bread,

day,—that is to say, if they are not as freely relieved as usual,—and you do not assist them by medicine, depend upon it, to-morrow they will be confined, and there will be no relief at all. If, then, the bowels are *disposed* to be costive, I would recommend one large table-spoonful of castor-oil—if it does not nauseate the stomach,—and advise that the dose be repeated in four hours, if the desired effect has not been produced;—or, a wine-glass of *beaume de vie* at night; and early the next morning, before leaving the dressing-room, let the lavement be used, the injection consisting merely of a pint of blood-warm water;—or, the following pills will be found useful to be kept in the patient's bedroom:—Two scruples of the compound extract of colocynth and one of the extract of henbane, divided into twelve pills. Two or three of these may be taken at bedtime, when the bowels have not been, during the day, satisfactorily relieved. These are always ready in the bedroom, and as they generally answer the object efficiently, and with comfort to the patient, are the most convenient form of aperient.

It will now and then happen, however, that the female has let the day slip. When this is the case, in combination with medicine, the use of the lave-

—mush, or hasty-pudding, made from rye or Indian meal, and eaten with molasses, the free use of the dried laxative fruits, as figs, dates, stewed prunes, and our native fruits when ripe, will often enable the patient to dispense with medicine.

ment is desirable. Medicine alone will not answer the purpose, unless it be taken in doses so strong as will not only move the bowels but irritate them too. With the exhibition of the warm water, mild aperients never fail. Females, generally, are averse to the use of the lavement, and it is a prejudice which is most deeply to be regretted. I have known purgative medicines so often resorted to, and, in time, so increased in power and quantity, because they began to lose their effect, that by their continued irritation, disease of the lower bowel has been produced, and death has at last been the consequence. If, then, the bowels have been one or two days confined, the lavement in the morning will render much less medicine necessary, and frequently have an effect when medicine alone would not. Many ladies use the warm water every second or third morning, during the latter weeks of pregnancy; and by this means they regulate their bowels—which would otherwise be confined—with great comfort to themselves, and need no medicine at all.

I will only add one word, in conclusion, upon this subject. Let it be remembered, that if the bowels have been confined several days, and diarrhoea comes on, that this is not a natural relief, but the effect of irritation, caused by the presence of a loaded state of the lower bowel, which must be quickly removed by the medical attend-

ant, or it may give rise to some one of those serious evils already enumerated

SECT. IV.—DIARRHŒA

An affection very opposite to that which has just been discussed, may occur during pregnancy. We have seen how diarrhœa may arise as a symptom of costiveness. It will manifest itself, however, independently of such a cause. The intestines may participate in the irritability of the womb, and, their vermicular action becoming morbidly increased, diarrhœa is the consequence. It is a disease which varies very much in different individuals, and may clearly be divided into two kinds.

One, in which the motions are more loose and frequent than in health, but not otherwise much altered in their appearance. The tongue is clean, or only slightly white, and the appetite is pretty good. No medicine is required here; a careful diet will correct the evil.

In the other case, the stools are liquid, darkcoloured, and very offensive, accompanied with a coated tongue, bad taste, offensive breath, loss of appetite, and more or less disorder of the digestive organs. In these latter circumstances, your medical adviser should be consulted; in case you do not see him, I have found at first the following draught, given every three or four hours, very use-

ful:—rhubarb, eight grains; ipecacuanha, one grain; dill-water, one ounce.

As the tongue cleans, the stool becomes more natural, a wine-glass, three times a day, of some bitter infusion, such as cascarilla, orange peel, or gentian, may be taken with advantage. If the diarrhoea continues for any length of time, it is always wise to have the surface of the body kept warm with flannel; and this is best accomplished by a flannel roller bound gently round the abdomen.

But in either form of this disease, whatever remedies are proposed, there is one mode of treatment applicable to both, and which is the most important of all; a proper system of *diet*. The food must be sparing in quantity, of the mildest quality, and such as to leave, after the process of digestion, as little excrementitious matter as possible.

In a recent attack, the *first* day, the patient should only take mild drinks, containing a small quantity of unirritating nutriment; such as barley-water, or arrow-root made with water. Irish moss will be found palatable. During the *next* day or *two* the same diet must be continued, but may be given in larger quantity, and of greater strength. Tapioca, sago, and rice-gruel might be added to the list. When the irritation is somewhat allayed, on the *third* or *fourth* day, perhaps broth may be taken; but no solid food of any kind, least of all

solid animal food, until the disease is removed or greatly allayed. As soon as this is the case, a small quantity of the lightest animal food may be taken; such as the animal jellies, made from calves' head or feet, chicken with well-boiled rice, white game boiled, roast mutton and beef may follow; but lamb and veal for the future should be avoided.

It may be observed, that in some cases, where the diarrhoea has been of long standing, a *drier* diet is best, the liquid food appearing to keep up the disease. Rice well boiled, and merely moistened with a little broth, is the best and one of the most desirable articles of diet in such cases.

SECT. V.—PILES.

Pregnant women are very subject to piles. Both with costiveness and diarrhoea they are a frequent attendant, but particularly with the former. They will usually disappear, if they are slight, as soon as the bowels are restored to a healthy action; but they may not, and then will give rise to great suffering.

The pregnant woman recognises piles under two forms: i. where they exist as little tumours within or without the bowel, becoming, very soon after their exclusion, more solid and firm, unless they early break and bleed; and ii. where they pre-

sent, without the bowel, a tumour, large in circumference, separable in lobes, altogether like a piece of sponge coloured, and bleeding occasionally from the surface.

Of all the *causes* which operate in the production of piles, habitual constipation is the most frequent. The excrementitious matter is delayed in the bowel, becomes hard and knotty, and a source of great irritation: this irritation induces a determination of blood to the part, and the gradual dilatation of its vessels takes place as a consequence, which eventually forms the tumours known under the appellation of *piles*. Now, as in pregnancy there is a greater disposition to costiveness than at any other time, and as piles are a consequence of this disordered function, so this disease is much more prevalent during the pregnant state than at any other period; another argument, and a very powerful one, why costiveness should be diligently guarded against.

The *symptoms* of this complaint are well known. There will be weight, heat, and a sense of fulness about the lower bowel, a frequent desire both to relieve the bowels and bladder; all of which symptoms are removed for a time if a discharge of blood takes place.

If the piles be without the bowel, they are constantly irritated by the friction of the parts in the ordinary motion and erect position of the body, and that to a painful degree during the period of

the evacuation of the bowels. If exercise be taken in a carriage, the pain is much aggravated; and if the irritation produce inflammation, the piles will become swollen, red or purple, and excessively painful.

The *treatment* of this disease, when it occurs during pregnancy, is two-fold—general and local. We must remove the *cause* by such means as excite a brisker action of the bowels; and our choice of aperients must be directed to those which act efficiently but mildly, and without irritating the lower bowel itself.* Next to small and repeated doses of castor oil—say a table-spoonful,—the most desirable form of aperient that can be employed is the confection of senna, that is, lenitive electuary, combined with sulphur and magnesia. Of the following form, a dessert-spoonful or more should be taken, at first, twice daily:—Confection of senna, two ounces; flowers of sulphur, one ounce; carbonate of magnesia, two drachms and a half. In conjunction with this medicine, much benefit may be derived by the injection of half a pint of warm or cold water—whichever sooths most,—as a lavement; but it must be administered very cautiously, to avoid irritating the parts with the pipe of the instrument.

* Mild lavements or enemata are here highly serviceable. Where the excrementitious matter is hardened or compacted, the distention of the bowels by from a quart to 3 pints of starch water, followed by weak soap suds, is a very efficient remedy.

It is important that medicine, in frequent use should be so taken as to act upon the bowels in the evening only; for if the bowels are acted upon in the morning, the patient, being obliged to move about all day, will suffer considerable distress and local irritation; whereas, if the bowels are not evacuated till the evening, the horizontal position, and the perfect rest of a long night, will obviate all inconvenience.

Great assistance may be afforded in the cure, and also in alleviating pain, by external applications to the tumours themselves. If, however, the piles are swollen and inflamed, and the pain experienced great, half a dozen leeches, or from half a dozen to a dozen, should be first applied in their immediate neighbourhood, the parts fomented, and then warm bread and water poultices renewed every three hours.

These remedies will afford very considerable relief; and, when the inflamed state is subdued, an ointment must be applied to the tumours and around them night and morning, composed of two drachms of powdered galls, half a drachm of camphor, and two ounces of lard: or composed of one drachm of powdered black hellebore root, rubbed down in one ounce of lard. The latter preparation will, for some time after its application, give much pain, but proportionate relief will follow.

The *diet* must be sparing in quantity, mild in

quality, and such as to leave after its digestion, as little to pass through the bowels as possible.

I would beg attention to one more observation on this subject. The removal of piles by operation, during the pregnant state, is perhaps never justifiable. Let the patient, therefore, consult her medical attendant in time, and not by a false delicacy expose herself to an evil which it is her duty to endeavour to prevent.

SECT. VI.—ENLARGEMENT OF THE VEINS OF THE LEGS.

This is a frequent, but not very troublesome, accompaniment of the latter months of pregnancy. It arises in some degree from the pressure of the womb upon the large venous trunks, impeding to a certain extent the free flow of blood through them. It is frequently remarked in pregnant women who have passed a certain age; but it is particularly unusual for it to happen, in the case of young women, even during a series of repeated pregnancies.

When first observed, *if the veins have not become knotty*,—that is, having little lumps or swellings in their course up the leg,—the only means which it is necessary to employ, is the application of a muslin or cotton bandage,—six yards in length, and as wide as three fingers—from the sole of the foot up to the knee, and sufficiently firm to give

support to the venous trunks. This bandage well and equally applied to the limb, with a little aperient medicine twice a week, and the recumbent position for two or three hours in the middle of the day, will cure this form of the affection.

When after a time the *veins more and more distended, have become lengthened, tortuous, coiled up or knotty*, the female begins to experience a sense of heaviness, numbness, and sometimes very acute wandering pain, through the whole of the affected limb. In a more advanced stage, in proportion as the knotty tumours increase, the limb becomes generally swollen.

This form of the disease calls for much care and patience on the part of the sufferer. The legs should be strapped, from ankle to knee, with strips of adhesive plaster, and over this a muslin or cotton bandage must be applied with a moderate degree of tightness, and kept wet with goulard water. In conjunction with these local applications, it is sometimes wise to lose a few ounces of blood from the arm, and always necessary to take every other night a gentle aperient, to live upon a spare diet, and for some days to keep the horizontal posture. An elastic laced stocking made for the purpose may be afterward worn, and will be found at once a sufficient support to the limb, and a source of great comfort to the wearer.

SECT. VII.—SWELLING OF THE FEET AND LEGS.

In the course of pregnancy, during the latter months particularly, the feet and legs frequently become much enlarged. It is partly owing to the pressure of the womb, but sometimes apparently independent of it. It is first observed toward night, about the ankles; by degrees the swelling rises higher, and the legs may become of a very large size. The female suffering from this complaint, always goes to bed with legs much swollen, but towards morning her face swells, and the enlargement of the legs disappears to a greater or less extent, returning, however, as the day advances.

Sometimes this disease is very trifling in its character, and in ordinary cases, except aperients, no medicine is necessary, and support may be given by a well-applied flannel roller; but when the swelling is extensive and permanent, remaining in the same degree after the patient has been for several hours in bed, and connected with uncomfortable sensations in the head, an accelerated pulse, etc., a medical man ought to be consulted, for the consequences might otherwise be dangerous.

SECT. VIII.—PALPITATION OF THE HEART

If this affection occur for the first time during pregnancy, it is rarely connected with disease of the heart itself; it is therefore without danger, although very distressing. Occasionally there is connected with it throbbing of the vessels in the temples, as also in the abdomen; the latter not unfrequently mistaken by the patient for the beatings of the heart itself.

It will make its attack repeatedly in the course of a day, particularly after a meal; and very frequently at night, on first lying down in bed; and it may be brought on at any time by the slightest agitation of mind.

Treatment for an attack.—When it comes on it is to be relieved by putting the hands and arms up to the elbows in water, as warm as can be borne—friction with the warm hand applied to the feet—absolute rest—and taking the following draught: Compound spirits of ammonia, half a tea-spoonful; Camphor mixture, a wine-glass. It may be repeated again in an hour or so, if necessary. It will be well to keep a bottle of this mixture in the bedroom; a resource will always be then at hand, and the dread which attends anticipation in a great measure removed. This is the more necessary, as an attack, if it comes on in the night, is always very distressing. The patient awakes, perhaps out

of a frightful dream, with a sense of fluttering in the region of the heart — calls out for breath — begs to have the curtains of the bed withdrawn, the door of the room opened — and will tell you she feels as if she was dying ; — wine, brandy, any stimulant that is at hand is resorted to, for the husband or friend of the patient is naturally much excited, and in his alarm scarcely knows how to act. Now there is no occasion for alarm ; the sufferer must be assured of this ; her mind must be soothed and quieted ; the means just pointed out for the relief of a paroxysm must be used ; the palpitation will after a little time cease, and the patient will drop off into a quiet and tranquil sleep.

These attacks may be prevented by taking for ten days or a fortnight a tea-spoonful of the following electuary three times a day : — Carbonate of iron, one ounce and a half; sirup of ginger, one ounce and a half. The bowels must be carefully regulated; a table-spoonful of Elixir Prop. is the best aperient, provided there are no piles. Fatigue and all exertion must be avoided, and the mind kept perfectly tranquil.

SECT. IX. — FAINTING FITS.

FAINTING may occur at any period of pregnancy ; but is most frequent during the first three months, and especially about the time of quickening. It may come on when the person is at perfect rest,

but is ordinarily produced by unusual exertion,—exposure to heat,—or any sudden excitement of the mind. The paroxysm or fit is sometimes of short duration; and the female does not lose her recollection; she has a knowledge of what is going on about her, and soon recovers; but in other instances the fainting fit is complete, and of long duration, continuing for an hour or upwards.

The treatment during a fit.—This consists in immediately placing the patient in the recumbent posture—the use of pungent volatiles—sprinkling the face with cold water—free exposure to air, and the cautious administration of cordials. And if the fit continue long, the extremities must be kept warm, and the friction of a warm hand be applied to the feet.

It is scarcely necessary to add, that those who are subject to these attacks ought to avoid fatigue—crowded or hot rooms—fasting too long, quick motion, and agitation of mind. The bowels must be attended to; and a wine-glass of the infusion of columbo or cascarilla, taken every morning, will be useful in giving tone to the system.

After a few weeks the disposition to fainting will altogether subside, and although a very alarming state to those who are inexperienced, yet the subject of it should never allow her mind to be depressed, or to anticipate an unfavorable result. Pure air, simple diet, and regular exercise, as we said above, will do much to prevent it.

SECT. X.—TOOTHACHE.

This may appear a trifling disease, to notice in connexion with the subject before us; but, in the course of pregnancy, females will sometimes suffer severely from erratic pains in the face and teeth. As these pains are generally induced by the increased irritability of the nervous system, the result of the new action which is going on in the womb, and not from the decay of any particular tooth, extraction of any tooth for its cure is out of the question. Indeed, did the suffering arise from a carious tooth, its removal is unadvisable, inasmuch as this operation has been immediately followed by a miscarriage. The fact is, that the patients who have consulted me while suffering from this affection, have had, apparently, in most cases, very sound teeth; and, feeling confident that its cause has been what has been before pointed out, the treatment has been purely constitutional. The following pill may be taken, night and morning:—Socrctrine aloes, one grain and a half; blue pill, two grains; together with one drachm of the rust, or carbonate of iron, mixed with treacle or milk. The latter must be repeated twice a day for four days, and then a third dose may be added in the middle of the day; and the remedy continued, even after all uneasiness in the face has subsided for some time, with great advantage to the general health

The only local application I would advise, is that of washing out the mouth and teeth, night and morning, with salt and cold, or lukewarm, water. This plan of treatment not only relieves the painful affection of the face and teeth, but allays also that local irritability of the nerves, upon which it depended.

If a carious tooth seems alone affected, it has been proposed carefully to apply a drop or two of nitric acid, which is said to be infallible; a drop or two of oil of kreosote or cajeput is frequently useful.

SECT. XI.—SALIVATION

A pregnant female must not be surprised, if, some little time after conception, or during any of the months of gestation, the ordinary quantity of saliva, which lubricates and keeps the mouth constantly moist, should increase to such an extent as to be exceedingly troublesome; and, indeed, sometimes become so excessive, as seriously to affect her health. It is a symptom of pregnancy, but a very unusual one; although the quantity of saliva discharged has now and then exceeded three, and even four pints daily.

It differs essentially from the salivation produced by the exhibition of mercury, inasmuch as in this case, there is no tenderness of the gums,

or disagreeable fætor in the breath. The fluid itself is either perfectly colourless and transparent, or more tenacious and frothy. It has an unpleasant taste, and, when tenacious, induces vomiting. It is generally accompanied with acidity; and the plan of *treatment* most advisable, when the disease is moderate in its character, is the frequent use of from 20 to 30 grains of magnesia, say every morning, rinsing the mouth out very often with lime-water, and to resist the desire to discharge the saliva from the mouth as much as possible, for, if it is not very great in quantity, it may be swallowed with advantage. Should this symptom, however, be very excessive, the health will suffer considerably in consequence, and the assistance of the medical man is imperatively called for.

SECT. XII.—A PAINFUL AND DISTENDED CONDITION OF
THE BREASTS.

Pain and tension of the breasts frequently attend, as also they are natural consequences of, conception.

In a first pregnancy, a large and rapid development of this organ may take place, the breast becoming two or three times as large as before marriage; but if tight lacing be only avoided, and the breasts be permitted to expand, no material inconvenience will arise from this circumstance.

As, however, these symptoms are sometimes attended with considerable distress, I would advise, under such circumstances, the application of half a dozen leeches, or more, tepid fomentations, and a gentle aperient—two drachms of Epsom salts in a little peppermint water—night and morning. These means, by relieving the over distension and fulness of the vessels of the part, remove the cause and complaint at once.

If these symptoms occur to a female who may have been several times pregnant, and formerly has had an abscess in one or other breast, that bosom is generally most painful which was before affected, and there will be an increased hardness about it, which may give rise, perhaps, to the apprehension of an abscess again forming, or, what is much worse, to the disease terminating in cancer. Both these fears are groundless: and, if she will only use fomentations, gentle friction frequently during the day, with almond oil and laudanum—about a drachm of the latter, to an ounce of the oil, warm,—and exercise patience, everything will do very well.

Nature often seeks her own cure, and a colourless, thin fluid runs from the nipple, which relieves the symptoms.

SECT. XIII.—CRAMP, AND PAINS IN THE LEGS, ETC.

Some females, during the latter months of pregnancy, suffer dreadfully from cramp and pain in the legs, and about the sides and lower part of the stomach. This symptom arises from the pressure of the womb, upon certain nerves in its neighbourhood, which proceed to the extremities.

If the cramp be seated in the muscles of the legs, a hard, knotty induration is perceptible to the touch, accompanied with great soreness, the latter continuing for a long time after the lump has disappeared. An uneasy position of the muscles is a sufficient cause of irritation, to produce it, and it is frequently removed, by simply rising from the bed or sofa, and walking the room, so as to put the muscles of the leg into action. If this does not succeed, warm friction with the naked hand, or with camphorated oil, generally will.

If spasm affect the sides, or lower part of the stomach, the speediest relief will be obtained from twenty, to five-and-twenty, or thirty drops of laudanum, with a little æther, in distilled peppermint water, or, even at the moment, a little brandy and water; but I generally order, for patients who are at all subject to this affection, the following mixture:—Batley's sedative solution of opium, one drachm; compound tincture of lavender, half an ounce; distilled peppermint water, six ounces.

Two tablespoonfuls to be taken before retiring to rest, if there is the slightest intimation of an approaching attack, and also direct, that the feet be put into a mustard foot-bath. During the attack, great benefit will be derived from the external application of hot flannels, moistened with the compound camphor liniment.

SECT. XIV.—VIOLENT MOVEMENTS OF THE CHILD.

Before the third month of pregnancy, the child is not sufficiently developed to enable it to move. When a little further advanced in growth, it moves, but so feebly and imperfectly, that the mother is not yet sensible of it. A period, however, soon arrives, when its movements, although at first like the mere fluttering of a bird, acquire a power and force, that enable it to give decided proof of life. It is instantly recognised, the female knows she has quickened, and perhaps the sensation experienced is so sudden, that she faints. After this time the motions of the child increase both in frequency and degree, and are readily perceived by the mother, but after a time the womb accustomed to this action within itself, is less sensible of its effects, and except as a satisfactory evidence of the life of the child, is little regarded.

Sometimes, however, the child is *disagreeably*

active, so violent as not merely to alarm the mother, but occasion much sickness and uneasiness;—sleepless nights; feverish symptoms, etc., and all this to such an extent, as to require medical interference. If this is not thought necessary, relief will be obtained from losing blood, when not otherwise objectionable to the amount of a few ounces; gentle aperients, and a night draught containing from 25 to 30 drops of Batley's sedative solution of opium. These remedies will afford the greatest relief, and if the symptoms are not altogether removed by them, the female must then endure patiently, recollecting they are a proof that the child is alive and vigorous.*

SECT. XV.—SORENESS AND CRACKING OF THE SKIN
OF THE ABDOMEN.

It will sometimes happen during the latter months of pregnancy, that the skin covering the abdomen will not yield readily. This produces much uneasiness; the skin becomes tender and fretted, and if there is very great distension, cracks. It forms a source of great discomfort, and renders the female miserable whenever she moves.

* In many parts of New England, the moccasin root is much used to allay the motions of the child. One tumblerful of the infusion of this root, is the usual quantity.

It is to be relieved by fomenting the parts with a decoction of poppy-heads;* and the frequent use of warm almond oil, applying in the intervals spermaceti ointment, spread very thinly on a piece of soft linen.

SECT. XVI.—INCONVENIENCE FROM SIZE.

Many women in the latter months of gestation experience considerable annoyance, and sometimes severe suffering from the great size of the abdomen, and from want of support, when even not so very large. This is a rare occurrence in a first pregnancy, owing to the firmness of the abdominal muscles, but very frequent in subsequent ones. Little women especially suffer from this unpleasant cause, and, in fact, it is so universally the case with all, who have borne children *rapidly*, that it is highly important for a female to be provided with the means of relieving it.

There is but one remedy with which I am acquainted, but have usually found it answer every purpose. It is wearing during the day-time a well-

* This decoction is made by taking four ounces of poppy-heads, breaking them up, putting them into a vessel, pouring upon them four pints of boiling water, boiling the whole for fifteen minutes and then straining off the liquor.

applied belt, next the skin. It must be sufficiently broad for its upper edge to surround the abdomen above the point of its greatest diameter, and its lower edge to come down to, and be supported by, the hips. It must be drawn tight by a lace-string behind, as circumstances may require, and it must likewise be supported by broad straps passing over the shoulders. This will give the required support to the womb, and when the patient is in an upright position, as much as possible of the weight, of what she externally carries, will be thrown upon, or hang from, her shoulders.

Those who suffer much from this cause, ought also to lie down upon a couch or bed, for two or three hours every day; this will give great relief to the muscles.

SECT. XVII.—BEING UNWELL DURING PREGNANCY.

A female may be pregnant, and yet be unwell for one period or more while in that condition. Indeed, it may take place every month to the time of quickening, and has even continued in some rare cases up to the time of delivery.

Now, although this can scarcely be called one of the diseases of pregnancy—for it, ordinarily, in no way interferes with the health—still, as while the discharge is actually present it predisposes to

miscarriage, it is necessary to give one or two hints of caution.

Any female, then, thus circumstanced should manage herself with great care immediately before the appearance, during the existence—and directly after the cessation of the discharge. She should observe the most perfect quiet of body and mind—keeping upon the sofa while it lasts, and carefully abstaining from any stimulating or indigestible article of food, and if any symptoms of pain, uneasiness, or threatening miscarriage come on, immediately seek medical advice.

A case, showing the necessity of carefulness under such circumstances, occurred to me some time since, and its relation is all that I need add upon this point.

A lady, resident in Gloucestershire, missed one period, suspected herself to be pregnant, but being unwell on the following month, supposed herself mistaken. She had occasion, however, to come to London on the second day of her being unwell—Monday. On the Wednesday following she suffered considerable uneasiness from the exertion attendant upon the journey, and on Friday while from her hotel was obliged to return home in haste, and before night, miscarried.

Here then is a case in point—first proving, what some persons deny, that a female may be unwell and yet be pregnant, for she could not perceive the slightest difference in the appearance of the dis-

charge from what ordinarily took place, and it was exact as to the time of its return—and, next, showing how necessary is great caution, and the most perfect quiet since undoubtedly this lady would not have miscarried, if her journey had only been delayed another week.

Jaundice sometimes occurs in the early or latter months of pregnancy—certain affections also of disordered function of the heart, producing palpitation—a troublesome cough, accompanied with considerable pain in the head, sudden attacks of difficulty of breathing, and distressing inconvenience from irritable bladder.

These, and many other slight affections may manifest themselves during gestation, but of those I say nothing. It would be advancing beyond the bounds by which I thought it right to limit myself, and departing from the object proposed.*

* There are one or two complaints to which the pregnant female is subject, upon which a few remarks seem advisable. Speaking of Headache, Mr. Fox remarks:—

"Headache, independent of accidents, may be a sympathetic affection arising from disorders of the digestive, or other organs. It may be the consequence of a feeble, or disturbed state of the nervous system: or it may be the effect of the vessels of the head being distended with too much blood; or even of a deficiency of blood in the head.

"Where headache arises from a disordered condition of the digestive organs, there will generally be an inactive, or irritable, state of the stomach and bowels, which will frequently be accompanied by giddiness, imperfect vision, or by specks floating a short distance from the eyes, by loss of appetite, sickness, acidity of the contents of the stomach, and by flatulence.

I have finished what was purposed, and presented the married female with that information,

"If the stomach be loaded with undigested, or irritating food, it is to be relieved by a gentle emetic. Having drank a pint of warm chamomile tea, or common tea from one ounce to one ounce and a half of ipecacuanha wine should be taken, after which vomiting will ensue almost immediately, and without any straining, or painful effort. If ipecacuanha wine is not at hand, two or three tea-spoonfuls of powdered mustard, mixed in a little water, may be used in its stead.

"In almost every case, it will be found necessary to administer mild aperients every four or five hours, till the bowels are emptied. The aperients may be, rhubarb and Castile soap, of each one drachm, oil of cloves six drops, mixed with a simple syrup, and divided into thirty pills, of which from three to six are to be taken every four or five hours, till the bowels act. Where no disposition to piles exists, from one to two tablespoonsfuls of compound decoction of aloes may be taken every four or five hours, till the bowels are relieved freely. Where much acidity in the stomach is present, from fifteen to twenty grains of magnesia, combined with six grains of powdered rhubarb, and the same quantity of ginger, may be substituted for the above aperients, and repeated in a similar manner.

"If the pain in the head continues to be severe, after an emetic has operated, or before the aperients begin to act, it will be often greatly mitigated by taking a moderate dose of some opiate; this, however, should not be employed where attacks are frequent, as a habit of taking opiates is productive of much injury.

"There are persons who do not experience relief from opiates, but on the contrary, have the pain aggravated by their use. Strong green tea, or hop tea, will occasionally give relief in mild attacks, or where decided opiates are not productive of benefit.

"Where a feeble, or disturbed, state of the nervous system gives rise to headache, aperients are to be taken as recommended above, and stimulants are to be employed, as camphor, ammonia, compound tincture of valerian, æther, &c.

"Four grains of carbonate of ammonia, or fifteen or twenty

for direction and relief in those little ailments and discomforts which frequently arise during preg-

drops of spirit of hartshorn, are to be mixed in a wineglassful of camphor julep

"One or two teaspoonfuls of compound tincture of valerian are to be added to a wineglassful of water, or camphor julep.

"From twenty to forty drops of æther are to be mixed in a wineglassful of water, or camphor julep.

"Any of the foregoing forms may be taken several times during every twenty-four hours, if necessary.

"If the head is hot, linen, wet with vinegar and water, oreau de Cologne, and water, is to be repeatedly applied to the temples and forehead; or those parts may be occasionally moistened with æther, the evaporation of which will cause the head to become cool.

"Where reducing the temperature of the head does not diminish the pain, it will be well to try the effect of heat, which may be accomplished in the following manner: pour a little æther into the palm of the hand, and apply it to the forehead, or temples. The heat will be kept up so long as the hand is pressed to the part, and any of the æther remains.

"In severe cases of headache, the patient is to lie perfectly quiet, with the head moderately raised by pillows, and the room is to be darkened.

"If the feet are cold, they should be put into warm water; and if they have a disposition to become chilled again soon, they are to be kept warm by heated flannels, or bottles filled with hot water.

"During an attack of headache, arising from disordered digestive organs, it is essential that the food be very simple, and small in quantity.

"In headache, from nervous disorders, requiring stimulants, the food may be of a nutritious quality: the quantity, however, should be moderate.

"The foregoing remarks apply to sudden, or severe attacks of headache. When slighter affections of the same nature often occur, strict attention to diet, exercise, and the use of aperients,

nancy, for which she does not think it necessary

as recommended in a previous chapter, will greatly tend to mitigate the suffering, and to keep off the complaint altogether.

"Where headache comes on in consequence of fulness of the bloodvessels of the head, it will be indicated by a sense of weight within the scull, drowsiness, giddiness, particularly on stooping, sickness, ringing or other sounds in the ears, and bright flashes, or sparks in the eyes. In these cases, it will generally be necessary to bleed the temples with eight or ten leeches; and if their application to those parts is known to produce swelling of the eyes and face, the leeches may be placed behind the ears. The head is then to be kept cool by applying cold vinegar and water to it; and purgatives are to be administered.

"The diet is to be very simple, animal food is to be avoided, and no stimulants are to be taken.

"Headache may arise from whatever induces debility. It is generally experienced where great loss of blood has taken place, and it may seem singular that the symptoms and sensations of this kind of headache, appear to the patient to be the consequence of the vessels of the head having too much blood in them. For instance, there are usually noises resembling the violent beating of a hammer, the rushing of water, the blowing of wind, ringing, &c It is therefore necessary to notice the condition of the system, to be enabled to decide whether the pain arises from a deficiency or from an over supply of blood to the head.

"A correct decision should be formed upon this point, by ascertaining whether there is a disposition to fulness of the system, or a state of emptiness of the vessels from great loss of blood, with general debility.

"In the latter case, quietness is most essential: wine and other stimulants, will be necessary; together with a light nutritious diet.

"Opiates also, will generally be found requisite, such as have been previously enumerated in this chapter.

"In all cases of headache, mental tranquillity is of much importance; and the patient should not persevere in the pursuit of any occupation which materially increases the pain.

to consult her medical adviser, and yet from which

"In this disorder, as well as in many others, accompanied by much irritability, the sleep is often seriously interrupted by slight noises ; in most cases, this may be prevented by stopping the ears with small plugs, three quarters of an inch in length, and about one quarter of an inch in diameter. If the plugs be made of white wax, they will generally answer the best, as they admit of being accurately moulded to the form of the openings of the ears. Plugs made of turned wood will sometimes be sufficient.

"If such plans as the foregoing do not soon give relief, medical advice should be had, especially where it is supposed that there is too much blood in the vessels of the head.

"Tenderness and irritability of the external parts sometimes come on to an almost intolerable extent, in consequence of inflammatory action. They are most effectually relieved by bathing the parts occasionally with cold or hot water, or decoction of poppy heads, or of laurel leaves, and by using a soothing lotion. The soothing lotion may be made of two drachms of acetate of lead, commonly called sugar of lead, and an ounce of laudanum, n seven ounces of water. It may be applied three or four times during every twenty-four hours.

"In these troublesome affections the bowels must be kept rather more active than usual by gentle aperients. The aperients to be, from two to four drachms of Epsom salts. From one to two teaspoonfuls of electuary of senna. From one to two tablespoonfuls of castor oil. Or from fifteen to thirty grains of magnesia. Any of which may be taken every second night, or every night, as circumstances may require. The diet should be mild, and there must be a total abstinence from spirit, wine, and malt liquor. If these means fail to give the desired relief, it will be advisable to bleed the parts occasionally with six or eight leeches, and to apply poultices of the same kind, and in the same manner, as recommended in another chapter.

"A discharge frequently appears from the passage, which is either white, or slightly tinged with green, or blood ; in such cases, the parts are to be washed, or the passage injected with a syringe twice daily, with tepid milk and water, or a weak solution of

she will not unfrequently go on suffering for weeks, rather than speak of them.

alum in water. For the wash, or injection, twelve grains of alum may be dissolved in six ounces of water, and about two tablespoonfuls injected at each time.

"Means should be used to secure the regular action of the bowels, by employing mild aperients and injections, as previously recommended.

"More vigorous measures than the above might be productive of much mischief."

CHAPTER V.

ON THE PREVENTION OF MISCARRIAGE.

THERE is no accident befalling female health which forms a greater source of dread, anxiety, and subsequent regret to a married woman than miscarriage. When this occurrence becomes habitual, there is no circumstance the consequences of which are productive of more serious injury to the constitution, blasting the fairest promises of health, and oft-times laying the first seeds of fatal disease.

The frequency of its occurrence, however would excite little surprise, were the delicacy of attachment which exists in the early months of pregnancy between the future offspring and its parent only understood, for it would then be perceived with what facility this union may be destroyed.

If, then, this disease is so frequent in its occurrence—if its consequences are so serious when the habit of miscarriage is established, and if the facility with which it may occur is so great from the delicate and slight connexion which exists between

parent and offspring, at this early period, it will be asked, are there any means by the adoption of which, an accident so sad in its results may be prevented? Can the female herself contribute in any measure to avert its liability? Or can any plan be pointed out, the rules of which, when strictly observed, shall eventually remove this disease when it has grown into a "habit," and reward the female by carrying her securely and safely through to the termination of gestation, when next she shall become pregnant? In the majority of cases, and without hesitancy, I confidently reply in the affirmative, and it is because the success of such a plan depends for the most part upon the prudence and perseverance of the female in carrying it to a happy result—for a medical man can do little to arrest a miscarriage when the process is once set up—that she ought to be fully acquainted with the means of prevention.

There is another fact also, which I am sure will have considerable weight with any well-regulated mind: and that is, that the subject is of the highest importance to the party chiefly interested, not only as respects her own health, but also that of her offspring, whose condition from the first is dependant upon that of the mother; a disregard therefore to her own health may destroy the very life of her child.

SECT. I.—THE PERIOD AT WHICH IT MOST FREQUENTLY OCCURS.

The usual term of pregnancy is forty weeks or nine calendar months. At any time, however within this period, the child may be expelled, and if this take place before the commencement of the seventh month, it is usually called a miscarriage. The process of gestation may be checked from its earliest period, for many of the causes producing miscarriage which can operate afterward, may operate through the entire term, and hence miscarriage occurs not unfrequently within three weeks after conception; it most frequently, however, takes place between the eighth and twelfth week.

SECT. II.—ITS SYMPTOMS, ETC.

With regard to the nature of this process, and the mode by which it is effected, we have in this place little to do. In warning the female of its probable approach I have only to mention certain local appearances, and other general and constitutional symptoms, which indicate its commencement.

Thus, if during pregnancy a female experience an unusual depression of strength and spirits without any apparent cause—if this is accompanied

with attacks of faintness, pains going and coming about the lower part of the stomach, loins, and hips, *she threatens to miscarry*. If these symptoms are after a time followed by the discharge of more or less blood, *a partial separation* of the child has already taken place; if the pains in the loins and hips increase, becoming sharper and more expulsive—bearing down—with a free discharge of clotting bright-coloured blood, *the child is altogether separated*;—and in fine, if the blighted and dead child is not quickly expelled, thus terminating the whole process, this will be the case before many days elapse, preceded, however, in such a case, by the breasts becoming flaccid, the stomach and bowels more or less disordered, and the discharge altered in appearance and offensive in character.

Here, then, the presence of the discharge, the quantity poured forth, and the subsequent alteration in its colour, are, as will be afterward pointed out, signs of considerable importance in marking the progress of miscarriage.

SECT. III.—THE CAUSES.

The causes of miscarriage are numerous: they are either of an accidental or constitutional kind. The most important of these are the following:—
ACCIDENT may give rise to it. The delicacy of

attachment between the offspring and parent, and the facility with which this union may be destroyed, have already been alluded to. If then a sudden shock by a fall, or a blow on the stomach occur to a female while pregnant, she can readily perceive how miscarriage may take place as a consequence.

VIOLENT EXERCISE OR EXERTION is a very frequent cause. Immoderate exercise in dancing, riding, or even walking ; lifting heavy weights, the fatiguing dissipations of fashionable life—all, or any of these will sometimes produce so much disturbance of the nervous and vascular systems, as seriously to affect the well-doing of the child, and frequently produce miscarriage.

VIOLENT PURGATIVES, EMETICS, etc., may produce miscarriage. It is well known that drastic purgative medicines, by their cathartic influence upon the lower bowel, now and then cause miscarriage ; and that the violent action upon the stomach, of powerful emetics may produce a like effect. Both, therefore, should be carefully avoided during pregnancy.

This leads me to observe, that strong purgative medicines, used with a view to promote miscarriage, are necessarily taken in such quantities as generally to produce inflammation of the stomach and bowels, and if abortion is thus intentionally and wilfully effected, not unfrequently a:

a sacrifice which is never calculated upon—the death of the mother!

VIOLENT MENTAL EMOTIONS are capable of disturbing the organs of the body, and so producing miscarriage. It is notorious that our physical condition is affected by the state of the mind: In the peculiarly sensitive condition of the pregnant female, any extraordinary excitement, or depression, especially when produced suddenly, may therefore give rise to the evil of which I am speaking.

THE FORCE OF HABIT on the part of the womb to expel the child at a certain period, of pregnancy is the *most frequent* cause of miscarriage. What I mean is this: Miscarriage having once occurred from accident or any other cause, there is a tendency to its repetition. A female goes on in a very promising way to a certain time, and then miscarries, and again and again this occurs. Thus “a habit” is induced on the part of the constitution of the individual to the production of this accident, and then also slighter causes, applied at the period when miscarriage formerly happened, will be sufficient to induce it, than would be required at another time.

DELICACY OF CONSTITUTION, connected with habits of indulgence, may give rise to a state of health producing miscarriage. In high and fashionable

life, among those who use little exercise, live luxuriously, and sleep in soft warm beds, there is often a weak condition of the vessels produced, which conveys the blood from the parent for the nourishment of the child, and the increased impetus and force given to the circulating fluid, induced by these habits, detaches one or more of these vessels, so that the supply necessary for the growth of the child is cut off, and it withers, dies, and is expelled.

In a NATURALLY ROBUST AND VIGOROUS CONSTITUTION, the same effect may be produced. Miscarriage may arise from a rupture of the vessels of communication between parent and offspring, but then it is under different circumstances. An increased quantity of blood is made, more than is compatible with health ; it is propelled, as a consequence, with unnatural power, through the vessels of the body—the vessels of the womb participate in the irresistible vehemence of this action, and if they do not suddenly give way, the female experiences a sensation of weight and tension about these parts, with shooting pains about the loins, hips, and in the neighbourhood, which, if not relieved, rupture of the vessels quickly takes place, and miscarriage follows.

Lastly, a peculiarly excitable state of constitution ; continuing to be unwell during pregnancy ; advancement in life before marriage ; piles in an

inflamed state; as also severe and large loss of blood from their rupture;—these, and some other causes, may give rise to this accident.

SECT. IV.—THE MEANS TO BE ADOPTED FOR ITS PREVENTION.

Having thus briefly reviewed the principal causes which may excite miscarriage, we proceed to consider the means to be adopted for its prevention. I shall divide this subject into two distinct parts:—

- I. The plan to be followed for preventing miscarriage by those who are subject to it; and,
- II. The means which are to be used, to put a stop to miscarriage, when it is occasionally threatened.

I. *The plan to be followed for preventing miscarriage by those who are subject to it.*

This plan has reference to two distinct periods: before the female becomes again pregnant, and after she conceives. And I may illustrate the subject in two kinds of constitution, widely differing from each other, and requiring, in part, rules and directions directly opposite:—

1. The plan to be adopted by a female of delicate and feeble health and spare habit.

Before she again becomes pregnant, her object ought to be to invigorate her general health. This

s to be accomplished, first, by attention to the stomach and bowels. The latter may be comfortably regulated, by taking a wine-glass of the *jeaume de vie* at night, the last thing, twice a week, or oftener if necessary, the object being to induce a full and consistent evacuation daily. This medicine unites a cordial with its aperient qualities, and therefore strengthens the bowels, at the same time that it keeps them unloaded and free. But although it may be continued for a considerable time, and with benefit, it is better, as the bowels again acquire tone, from the improvement in the general health, to discontinue its use, and have recourse to the lavement every morning before leaving the dressing-room. I have known many instances where much harm accrued from the long-continued use of purgative medicines; and although the exhibition of the one just advised will be found exceedingly necessary, and beneficial in its influence for some weeks, I would much rather, after a time, do without purgatives at all, and simply use the warm or cold water injection; a little less than a pint in quantity every or every other morning.

In conjunction with the aperient, if there is much debility of stomach, manifested by little or no appetite, and uneasiness and sense of weigh after taking a meal, great benefit will arise from taking, three times a day, a pill consisting of one grain and a half of the sulphate of iron, and one

grain of the sulphate of quinine, rubbed down in two grains of the extract of gentian. This will not only strengthen the stomach and increase its digestive power, but at the same time, sharpen the appetite. It may be pursued for some weeks, and then only continued once a day, about an hour before dinner.

The *diet* must be small in quantity at first, but nutritious in quality. Mild animal food, as boiled chicken or white game, mutton and beef: these must be well masticated, and therefore, eaten slowly. The meat of young animals, as veal and lamb, must be avoided; as also pork. Fish should be seldom taken, as it leaves a large quantity of excrementitious matter in the bowels. Mealy potatoes, or well-boiled rice, stale bread, or captain's biscuit, should be the only solid taken with one kind of animal food, as the dinner meal; toward the conclusion of which, a glass of port-wine, thrown into half a tumbler of hot water, with sugar and nutmeg, is the best kind of beverage. Coffee with brown sugar, and brown bread not toasted, and a new-laid egg, are best adapted for breakfast; and coffee in preference to tea in the evening.

Animal food may be taken twice a day, when the stomach has acquired sufficient power to digest it, but in moderate quantities, and certainly never at night. The wine, too, may be increased to two glasses, but then without water. Port-wine is

most suitable, and it should never be taken until the conclusion of the meal.

Lying on a couch after dinner to induce sleep, does not at all assist digestion. Rest for a couple of hours is certainly necessary ; but the time should be employed in conversation, or light reading, rather than the frequently unrefreshing after-dinner doze. The patient must rise and retire to rest early ; she must lie on a hair mattress, and there must be no further drapery about the bed than curtains at its head. The chamber ought to be large and airy.

She must at once use the shower-bath, and at first, the temperate salt-water shower-bath, for a week or ten days. The temperature of the water must not exceed 85° , and not be lower than 75° ; and so gradually reduced, until the shock of the cold shower-bath can be borne. It must be used every morning, immediately upon getting out of bed—provided there is no perspiration present at the time—while the surface of the body retains the warmth of the bed. This insures reaction, or the well-known delightful glow, which will be proportioned, in a feeble and delicate woman, to the warmth of the skin and extremities, previous to receiving the fall of the shower. Warm water should previously be put into the bottom of the bath, so that the ankles are covered ; this will tend, in some degree, to lessen the shock, and, at the same time, to increase the reaction. Upon coming out

of the bath, the surface of the body must be rapidly dried, by a servant with coarse towels, or flannels, and as rough as they can be well borne, as the friction thus produced is exceedingly useful.

If the patient is residing on the coast, in the summer, she may bathe. It will be well, however, for her to commence with the tepid shower-bath. After this has been employed for ten days, or a fortnight, she may bathe, and the best time in the day is two or three hours after breakfast, exercise being taken previously, but not to an extent to cause fatigue or perspiration. The patient ought to plunge in, or be dipped suddenly: one or two dips at first, and, after a time, the stay may be prolonged from five to ten minutes, and the body must be speedily dried.

A very nervous and delicate woman, who cannot bear, from apprehension, the shock of plunging into the sea, or that produced by the shower-bath, will derive great benefit from daily having the body rapidly sponged with cold salt water, and quickly rubbed dry with rough flannel, etc.; the more friction employed here the better, because the greater will be the subsequent warmth produced. This method is not adopted by many, from fear of taking cold; but if it is effected quickly, I have no hesitation in saying, it is the best *preventive*, and diminishes the susceptibility to the impressions of cold. During the winter, the head and chest

should alone be sponged ; and during the period of being “unwell,” the cold bath is inadmissible.

It is not only necessary, however, to attend strictly to diet, and to the other means pointed out ; the patient must also adopt a regular system of exercise, proportioned to her strength. She should commence by taking gentle exercise on foot, or in an open carriage, between breakfast and dinner. As her strength increases, she may extend the walk or drive, or take horse exercise ; never forgetting, that it should always precede a meal, and never follow it ; that the amount of it should always be far short of fatigue ;—in a word, that she should always feel refreshed and invigorated by it.

A change of air is often very desirable, and affords one of the most powerful means of improving the general health. In midsummer, autumn, and during the winter, a residence on the coast is best for such a patient ; but in the spring and early part of the summer, inland is to be preferred.

By such a plan of proceeding, I feel confident that the general health will be restored, the female will no longer have a capricious appetite, foul tongue, disordered stomach and bowels—sometimes sluggish, sometimes relaxed ; she will no longer rise in the morning unrefreshed by sleep, and retire to rest at night, fatigued with the slightest exertion of the day : her flesh, which, by slow but progressive steps, she was losing, and had become flabby and apparently

bloodless, will now return, hard and firm, and possessing the blush of health and strength;—she will have found out how to obtain health; and she will, if I mistake not, be careful to preserve it.

After the patient becomes pregnant; let every cause which might excite miscarriage be avoided. The principal causes have been pointed out. The patient must sleep alone—this is absolutely and imperatively necessary; she must be more careful and attentive than ever to her diet, and the regulation of the bowels; and, above all, guard against costiveness. Let the shower-bath be still continued, and gentle exercise; but carefully avoid any fatigue. As the *period approaches* when *miscarriage occurred before*, let vigilance and attention to rule be redoubled. The patient must now keep on the sofa nearly all day; retire to rest early, still using a mattress, and taking care that the bed-room be airy and well ventilated. If the slightest pain or uneasiness is felt about the loins, or hips, the sofa must be immediately resorted to, and the medical attendant called in. If he approves it, a little blood should be lost, and the bowels gently acted upon. When these symptoms subside, the recumbent position must be continued, and the above directions carefully observed for six or seven weeks beyond the time miscarriage last occurred. At the expiration of that time, I might say, I believe you safe; gestation will go on. The health is invigorated, and the womb now strengthened, through

the general improvement and increased tone of the whole system, is not so irritable, and therefore is not so likely to throw off its contents. It is not so weak, and therefore does not flag as it did before; but is able to carry on those processes which are necessary for the continued life and perfecting of the offspring.

2. The Plan to be followed by a female of vigorous and robust health.

BEFORE PREGNANCY takes place, the excitement and fulness of the system must be gradually reduced, at the same time that its general tone must in no way be impaired. The plan proposed is the following:—

Let the *bowels* be regulated, keeping them slightly relaxed with Rochelle, Epsom, or Cheltenham salts; and if this is effected, no other medicine will be necessary.

Let the quantity of food be diminished, taking sparingly of meat; selecting that kind only, and but once a day, to which reference was made before: dining from vegetables, rather than from animal food; taking no wine or stimulant of any kind, no fermented liquor; the beverage with dinner being water only. Fashionable hours and habits must be given up; for they tend to keep up that excited state of the whole system which it ought to be the grand object to allay.

I would recommend rising early; sleeping in a

large and airy room, with little clothes about the person, to prevent the accumulation of too much heat.

The salt-water shower-bath must be used every morning ; the quantity of the water being considerable, and, from the first, cold ; observing the precautions before alluded to, in reference to rapidly drying the body. After the bath, a short walk may be taken before breakfast ; the latter should consist of coffee, brown bread, and fresh butter. The patient may use considerable, but regular exercise, between breakfast and dinner ; horse exercise, if it can be accomplished, is best ; but never to fatigue.

Change of air is not absolutely necessary ; but in spring, and the early part of summer great benefit will arise from pursuing this plan during a residence at Cheltenham or Leamington ; for everything there will contribute to its regular and successful employment. In midsummer and autumn, the seaside is most desirable ; as bathing, instead of the shower-bath, may be employed, in this case, with great advantage.

AFTER PREGNANCY has taken place the *diet* must be still sparing. If there is headache shortly after, with a full pulse, this slightly-renewed excitement of the system, depending at it will upon the new action set up in the womb, must be allayed by the loss of a little blood. This measure must be repeated, in small quantities, if judged

necessary by the medical man ; never, however, ought it at any time to produce faintness. The cold salt-water shower-bath should be still employed daily ; and cold water, used as *an injection* night and morning. The female syringes are all too small for the latter purpose, and much inconvenience is produced by the frequent necessity of withdrawing the pipe for the purpose of refilling the instrument. This is easily obviated by substituting for the common ivory tube of the lavement pump, a four inch gum elastic tube, about half an inch in diameter, and having several holes in its point, which must be rounded off. Any quantity of fluid may be injected into the *vagina*, with this instrument so prepared, without withdrawing the tube. Exercise must be continued—but not on horseback, and with care. It is most important that the more evident and immediate exciting cause of miscarriage—such as fatigue, dancing, etc., should be carefully guarded against ; and the patient, from the time she conceives, must sleep alone.

As the period approaches when she formerly miscarried, care and attention must be more than ever exercised. She must now keep to the sofa altogether ; and continue to do so for five or six weeks. If slight pain in the back should be experienced, it must not create alarm, but it will be right at once to seek medical advice. If however a female has ~~set~~ stood up to the rules laid down for her guid

ance, both for *before* and *after* conception, she need not fear any threatening symptom of her former accident presenting itself; but I confidently promise that she will, by going her full time, receive the ample reward of all her continued care and little privations.

II. *The Means which are to be employed to put a stop to Miscarriage when it is threatened.*

Now and then, particularly when it occurs for the first time, the whole process of a miscarriage does not occupy more than six or seven hours from the very earliest symptom of its approach to its final completion. But in by far the greater majority of cases, more especially when it has become "habitual," its progress is not terminated in as many days or even weeks. When this is the case—as is already evident—it may be clearly separated into Three Stages; a division I propose to adopt. This will tend to bring this important portion of my subject in a clearer light before the reader, and at the same time assist me considerably while pointing out, though with necessary brevity, those directions which are to be followed in the different stages of this accident:—

THE FIRST STAGE.—I shall speak of that as the "First Stage," in which the child as yet has sustained no injury, and the symptoms are only those *menacing* miscarriage.

It commences usually by the female experien-

zing a great depression of strength and spirits, without any assignable cause. She loses her appetite, and has a little fever. Pains about her loins and hips soon follow ; these are at first transitory, they go and come, and, after a while, increase in frequency. Or if the patient be of a strong and vigorous constitution there will be an excited condition of the circulation, manifested by a full pulse, throbbing in the temples, followed by a smart headache, a hot skin, thirst, and no inclination for food, and united with the pains in the loins and a sense of weight and tension. These are so many symptoms *threatening* miscarriage, but of course much modified by the constitution and previous state of health of the individual. For instance some will experience only an indistinct, dull aching pain in the loins, with slight languor, continuing for many days without any other symptom : but if these feelings come on about the same period from conception at which miscarriage formerly occurred, it behooves the patient at once to attend to them ; for if she does not, she may depend upon it the same event will befall her, however apparently trifling and unimportant the symptoms may be considered.

If then any of the foregoing symptoms present themselves, the female ought *immediately* to send for her medical attendant. This is the time at which the latter can interfere with the most certain prospect of success ; and almost everything de-

pends upon its being done at a sufficiently early period. This is the first direction offered—and with the next includes everything ;—*the imperative necessity of a strict and unvarying attention to the rules and regulations which he enjoins.*

It has already been intimated, that, at the first approach of these symptoms, the female must at once retire to her bed. She must strictly confine herself to it, resting on a mattress, with few clothes upon her, no curtains about her bed, or fire in the room—which ought to be large and airy. Her diet must be most sparing, a little toast and water, lemonade, or thin gruel, tapioca, or sago: and whatever is taken must be given cool. Some gentle aperient, Cheltenham or Epsom salts, in two-drachm doses, may be taken every four hours. By this time, in all probability, the medical man will be at her bedside.

THE SECOND STAGE.—But suppose the patient has not heeded these symptoms; that she has thought nothing of a little pain in the back, etc., and never having before miscarried, she has looked upon them as of no consequence. The local pains will increase in frequency and power, and soon a discharge of blood, in clots, will be discovered, or, if more freely, of a clotting bright colour. This indicates that a partial separation of the child has taken place, and brings us to what I call the “Second Stage.”

Now, although it must be apparent that, under these circumstances, the probability that the process of miscarriage will go on is much greater than in the former stage, still I have no hesitancy in saying that it is possible to check it even here; and that frequently. But in a situation so critical it will require a prompt and vigorous practice on the part of the medical man, and an equally decided and vigilant conduct on the part of the patient herself: and let the patient recollect when tempted to disobey the instructions she receives, because they may appear trifling, or a little too rigorous, that no man who enjoys her confidence, would willingly lay down one rule too strict, or one injunction, the performance of which was unimportant; and remember also, that by *one* act of disobedience she may blast every hope of success; and thus throw away in a single moment the result of hours, nay, of days and weeks of careful and persevering deprivation. The only directions advisable for a female's adoption before her medical adviser arrives, are strict rest in bed, cold water dashed over the loins and hips, and the sudden application now and then of a piece of linen dipped in cold vinegar and water, perfect abstinence, and the aperient, as in the former case, every four hours.

A female never ought, if the premonitory symptoms have been present, to advance to this stage of the accident; but it may be brought about very

quickly, by the shock from a fall, or any great exertion, when the first and second stages will frequently merge into one—separation of some portion of the child having taken place from the first. Let her, under these circumstances, follow the above directions, until she can obtain further advice.

THE THIRD STAGE.—If the previous means for stopping the progress of the threatened miscarriage are unsuccessful—if the discharge continues, the pains increase, becoming slightly bearing down, and the other signs follow, which have before been pointed out, the “Third Stage” is far advanced; and of course every expectation of success on the part of the patient, or her attendant, must have fled—and it only remains for him to conduct her safely through to the end; and afterwards adopt means for restoring her health and strength.

THE FIRST STAGE, then, is one of *warning*; and by improving it in time, a female ought never to miscarry.

THE SECOND STAGE is one of *hope*; and, with strict attention, that hope may be realised.

THE THIRD STAGE is one in which all means of prevention are useless, and therefore its *treatment* has not fallen under our notice.

CHAPTER V.

HINTS FOR THE LYING-IN-ROOM.

SECT. I.—THE PERIOD PREVIOUS TO LABOUR.

RECKONING.—The period when confinement may be expected, is naturally enough, to the female mind—particularly if it be a first labour—a matter of considerable importance; and it is very desirable that this event should be as accurately determined upon as may be.

It is very difficult, however, by what is popularly called “reckoning,” to determine positively the precise day upon which labour shall commence; although I have known frequent instances where this has occurred.

Conception, I believe, generally takes place a day or two after the last menstrual period; and if a female calculate on this supposition, reckoning nine calendar months from this date, she will commonly be right. Some are in the habit of reckoning from the middle period, between the last menstruation, and the one that should next ensue.

Neither mode is infallible, and indeed it is impossible to decide the matter to an hour or a day; but, as the first method noticed is preferable, I advise a note to be made of the *period* when *last unwell*, and the reckoning to *commence* from the *third* day of its *cessation*.

There are circumstances which may throw a female out of her reckoning altogether, referred to, at length, in the second chapter. If such should exist, she must wait till "quickenings" occurs; and consider herself advanced four months and a half the day it takes place. This is, at best, an uncertain mode of calculation; but it is the only one I have to offer.

SYMPTOMS OF LABOUR APPROACHING.—Labour is commonly preceded by certain symptoms, called "premonitory;" they sometimes appear several days, oftener only a few hours before its commencement. I shall notice only one of these, viz., a *subsidence of the abdomen*—arising in part from the fact of the child being situated *lower* than formerly.

This sinking down of the child may occur either *gradually*, and therefore almost imperceptibly, from day to day, yet sufficiently obvious after the lapse of several;—or *suddenly*, during the course of night.

It is a *useful* symptom, affording to the medical

attendant satisfactory information—and pointing out to the patient that her labour is not far off.

And it is attended with certain effects: in part agreeable, and in part productive of discomfort. Agreeable, because the female now feels lighter and more alert, and breathes with more ease and comfort than she has done for weeks past—and her night's rest is less interrupted.—Attended with discomfort, because the child being lower, the bladder and rectum are somewhat interfered with, and an irritable condition, of one or both, may arise.

ATTENDANTS, ETC.—At this time the nurse should be in attendance, if possible, and everything in the lying-in-room in order. The latter ought to be large and airy, and should have a dressing-closet attached to it.

The Friend that is to be present during the labour should be fixed upon. And it may be proper to suggest that medical men do not like unmarried females in the room; they are neither the most fit companions for the patient, nor the most useful assistants to the practitioner. Let a confidante be selected in some judicious and affectionate married friend, whose presence during the hour of trial, will ensure sympathy and yet encouragement.

During the labour the medical man, the nurse, and the patient's friend, are all the assistants the

occasion demands. The lying-in-room is not the place for a crowd. A great number of persons breathing the atmosphere of the same room soon pollute it; and if there happen to be a fire its temperature will inevitably be raised to a point which will make the patient restless and feverish,—add to her feelings of fatigue, and often, by rendering the pains irregular or ineffective, protract labour considerably.

The patient also is much disturbed by their conversation, and what is a much greater evil than this, by their imprudent remarks they frequently diminish her confidence in her own powers, or in the judgment and skill of her necessary attendants. The mind in a state of distress is easily excited and alarmed, and whispering in the lying-in-chamber, or any appearance of concealment, quickly produces an injurious impression.

BOWELS.—As labour approaches, the bowels should invariably be cleared by some aperient, or consequences exceedingly disagreeable to a delicate woman will inevitably occur at the latter stage of the labour. A tablespoonful of castor oil is the best medicine for this purpose, particularly if the bowels have already been confined a day or two; otherwise the use of the lavement is preferable, the injection to consist of one pint of warm gruel, or tepid water with two tablespoonfuls of castor oil.

THE BED-ROOM.—The bed-room of a lying-in patient should be large and airy, and, if possible, communicate with another room. It should have a fireplace for fire in winter, which in the summer should be made in the adjoining apartment. Of all rooms in the house it should be the least exposed room to noise.

The proper ventilation of the lying-in-room throughout the month (as much so as during the labour) must be carefully attended to. The air must be kept cool and fresh ; its temperature never allowed to exceed 60° of Fahrenheit ; and nothing that would render the atmosphere impure must remain in the room a moment longer than necessary. One of the principal sources of those diseases of the lying-in-room, which in former times were so prevalent, was the impure and heated air, together with the smothering system then pursued. The prejudices in which that system originated are not altogether laid aside in the present day, and the medical man's directions upon this subject are too frequently infringed upon. I am continually obliged upon entering the bed-room to draw aside the curtains, to open the door, or order the fire to be kept low, that a hot room may be made bearable.

The bed, in summer, should have only so much hangings about it as will serve to protect the patient from draught ; while, in winter, the curtains must never be so closely drawn that the atmosphere within them shall become confined and heated.

SECT. II.—THE PERIOD DURING THE PROCESS OF
LABOUR.

THE BED.—As the patient is to lie on her *left* side, the bed must be so placed that she may be either at the foot, or right side of the bed. Many prefer the foot, because the footpost serves to support the feet during what is called the second stage of labour ; but then this post should have a *small hair cushion* secured firmly to it by straps for the feet to press against, otherwise they will be found tender and fretted subsequent to labour.

Where there is both a mattress and bed, it is better for the mattress to be uppermost. The patient in a featherbed is likely to sink into a hole, which is inconvenient to the attendant, and keeps the patient too hot and close.

And next, the bed must be “guarded,” as it is popularly called. The method of doing this is very simple : The blanket and sheet having been placed upon the featherbed or mattress as usual, a blanket is to be spread upon the right side of the bed and toward the lower end, and upon this a skin of leather, or a large sheet of oil-skin ; one or two blankets are now to be folded over this—then a sheet, upon which the patient lies on her left side ; and lastly, a sheet, blanket, etc. is to be thrown over her person as the season of the year may determine. Patients are frequently too warmly

covered by the nurse, which relaxes and weakens when strength is of so much consequence.

THE DRESS.—When the pains of labour first commence, the dress should be so arranged that if its progress becomes suddenly rapid, it may be readily changed.

A loose dressing-gown is the best in the earlier part of the labour, which must be exchanged for a chemise and bed-gown folded up smoothly to the waist, as she lies down for good, and a petticoat without shoulder straps that it may afterward be readily removed.

Some persons suppose that wearing their stays during labour assist them, affording support; but they are improper, being rather in the way than useful.

SHIVERING.—Rigours are very common during the early part of labour, and will vary in degree from a gentle tremour to an agitation of the frame so violent as to shake the bed on which the patient rests. It is most desirable that this should be known, lest it should produce alarm, for which there is not the slightest ground. I am acquainted with one lady, where this symptom always ushers in her labour, which is quickly and easily accomplished.

The attendants in the room will wish to give spirits, warm spiced wine, etc., to relieve these

rigours, but this should be resisted. *Warm* diluting drinks are always useful, as tea, broths, plain gruel, etc.; but wine, or spirits and water, ought to be absolutely forbidden, for they are unnecessary, and are always productive of fever, and subsequent mischief.

VOMITING.—An inclination to be sick, followed by actual vomiting, is one of the most frequent occurrences attending the *early* part of labour.

It may be produced by the close sympathy which exists between the stomach and womb, but an overloaded stomach is a more frequent cause. In either case it is useful: in the latter, it clears the stomach of improper food;—in the former, the practitioner sometimes is very sensible of the good effects arising from it, in forwarding the labour. It is an everyday saying of a monthly nurse, “that one fit of vomiting has more effect than six pains,” and there is a good deal of truth in it.

CRAMP.—This is very likely to trouble the patient who has been unnecessarily kept for many hours on the bed in one position. It may affect the muscles of the side, the thighs, or legs.

Except that it produces intense pain for the moment it lasts, it is not attended with any unfavourable result; is relieved by the friction of a warm hand; or, if the patient be able, by getting up, and walking for a minute or two, in the bedroom.

EXAMINATION BY MEDICAL ATTENDANT.—Soon after the arrival of the practitioner, if labour has commenced, he requests through the intervention of the friend of the patient, or the nurse, to make an examination, “*to take a pain*,” as it is termed. This is frequently objected to; and from false delicacy the patient does not consent to his wish until obliged by the severity of her pains in a more advanced stage of the labour.

Now it is highly important that in the *earliest* stage of the process, this examination should be made, for the medical attendant obtains necessary and valuable information, which regulates his conduct. Thus he ascertains whether labour has actually commenced, or if her pains are spurious or false pains only, requiring a plan of treatment for their relief, which he at once prescribes. He is enabled to determine by it whether his assistance is necessary; whereas if it is deferred he might be the means of occasioning mischief, by being an idle spectator, when he ought to be acting. And moreover it enables him to acquaint his patient not only how far she has advanced in her labour, but what is of much more importance, whether the position of the child is natural.

On the other hand there exists a vulgar prejudice that these examinations are attended with great benefit, that they materially assist the labour, and expedite the termination of the female’s sufferings, and she is, therefore, naturally enough,

continually looking for such supposed assistance. This is an injurious mistake, for frequent examinations are not only superfluous, but may materially retard or interrupt the processes of labour.

POSTURE, ETC.—The time occupied by the labour, if well managed by the attendants, may be relieved of much of its tediousness. Until the patient is advised to lie down for good by her medical attendant, she may be allowed to pass through this period in that posture most agreeable to herself. Walking, standing, sitting, kneeling, lying on the bed, will all be tried in turn, and there is not the slightest objection to this. Indeed, confining a patient even to her bed-room during this time is quite unnecessary; she will be more amused by being allowed a greater range; this likewise will be rather useful than otherwise, by changing **the** air, as well as the scene.

The bed must not be too much indulged in: it heats, oppresses, and weakens the patient. If fatigued, she may lie down on the sofa, and should lie on her back, or right side, rather than the left, as this must be her future position. It is too much the practice of medical men and nurses to keep the patient on the bed from the very first, thus adding to the tediousness of the labour, unnecessarily wearying and weakening the patient, and frequently inducing severe attacks of cramp in the side, thighs, or legs.

A patient may almost determine for herself whether it is necessary for her to keep to the bed or not. What is called the first stage of labour is by far the longest usually, the pains being short and far between, becoming longer and more frequent as the stage advances, but unaccompanied by any disposition to *bear down*; the latter circumstance being the striking distinctive mark between those of the first and second stage. Now so long as the pains are not bearing down, the patient may keep about, and with advantage.

But during this time, perchance she will be importuned by the attendants "to bear down forcibly," that is, to exert the muscles under the power of the will in forcing downward. This is a very bad practice, adds greatly to fatigue the patient, but does not expedite the labour. She will soon be *obliged* to bear down, and *then* it will be useful

At this period, too, the female's mind is often depressed by being told through the whispering of some *kind* friend, that her pains do no good. This, however, is not the fact. The pains may not be so effectual as we might wish them to be, but every parturient throe during the first stage, however slight, is useful in forwarding the process. It is sometimes a very unfortunate occurrence when the attendants in a lying-in-chamber acquire an idea that the pains do no good, or are unprofitable. This has led to many improper practices intended to encourage the pains, to the use of cordials and

strong drinks, or to the exhibition of medicines supposed to have the effect of hastening delivery, by which it has often happened that a labour which would have terminated easily and happily in a few hours, remains unfinished for many hours, sometimes for days.

It is at this time, too, that the patient complains of great pain and *suffering in her back*, and is very urgent to have pressure made in order to alleviate the pain. This support, however, must be given with care. For it would seem that the degree of pressure made, must sometimes tend to bruise the back, so powerfully is the hand pressed upon it. But the patient is desirous of having it made, and conceives that it so much relieves her that it is impossible almost to forbid it, altogether.

DIET.—This must be light and simple. Tea, coffee, broth, plain gruel, arrow-root, light nourishment of this kind is best. Solid animal food is hardly admissible, and wine, spirits, or caudle, is always followed with mischievous consequences.

It is a very common practice to urge females to eat, and drink, *to keep up their strength*, great muscular exertion being supposed essential to the accomplishment of labour, and that this can only be supported by the free use of nourishing and stimulating articles of diet. The opinion is not only incorrect, for experience fully proves this, but if

acted upon is decidedly *unfavourable* to a *safe* and *speedy delivery*.

PROBABLE DURATION OF THE LABOUR.—Though the progress of labour is almost always slower with a first, than with any subsequent child, I can confidently declare, that under proper management, there is not a jot more danger with a first than with future deliveries. This fact ought to inspire confidence in the powers of nature, and in the skill of the medical attendant, and thus prevent both needless anxiety and injurious impatience.

Labours vary considerably in respect to duration, whether a first labour or not. In the same woman the process shall have been accomplished with rapidity for three or four successive confinements, and then a tedious and protracted labour shall follow. This circumstance, however, does not necessarily involve either difficulty or danger, but in ninety-nine cases out of a hundred is equally safe with former labours, providing no *meddling interference* be used, and nature left to the secure, though it be slow, accomplishment of her object.

Generally it is quite impossible for a medical man to form an opinion worth anything, as to the probable duration of a labour, and therefore the incessant inquiries made upon this point are in fact useless: but not so, the confident assurance of the medical man that all is *going on well*; it ought to inspire the *patient* with *confidence*, and

with that gentle and patient endurance, which at such an hour will prove of inestimable value to her.

Labour is looked upon by the timid and inexperienced young female with apprehension and dread, arising in a great degree from ignorance and idle gossip. I have known young women who have, after marriage, dreaded lest they should become pregnant; simply from the fears they entertained of labour. I do not of course mean to deny that it is attended with pain, although I have known females give birth to their offspring, acknowledging that their sufferings were so slight as to excite their surprise; but all I mean to say is this, that a labour is a *natural* process; as such, judiciously managed, it is unattended with danger, and the amount of pain falls very far short of what is generally anticipated.

CLOSE OF LABOUR.—When the labour is proceeding rapidly and *the pains become bearing down*, as it is now far advanced, *the bed must be kept altogether*. This is what medical men call the second stage, and having arrived, the patient may assist somewhat with voluntary effort, viz. exerting her abdominal muscles and diaphragm; and to enable her to do this she must not scream, but during pain, hold her breath. A cloth or jack-towel will also be fixed to the bed-post for her to pull by, or the hand of another person. But this auxiliary ought

not to be employed to pull by so much as to fix the trunk. And if the patient only follow the dictates of nature in this matter, she will do right; for she will find that all that is required is almost an involuntary exertion of voluntary muscles. Let her, however, be careful to make no straining effort in the absence of pain, during the intervals of which she ought to lay at perfect rest, renewing her strength. As its termination immediately approaches, the patient must be careful not to give way to feelings of impatience and become restless, but implicitly follow the directions of her medical attendant, otherwise serious consequences to herself might hereafter ensue. And now, if she have previously obeyed his instructions, she will be in possession of that strength and fortitude, which are called for at this time, and prove invaluable.

The labour *completed*, the patient may turn slowly on her back, and a *broad bandage* will be slipped under her, spread evenly, and pinned sufficiently tight around the lower part of the person, to give a comfortable degree of support. This bandage or belt, made of linen or cotton cloth, should always be in readiness for the medical man.

A little tepid gruel may now be taken by the patient, and she should be left to rest. If disposed to sleep, she should indulge it; but if not must be kept perfectly quiet, and undisturbed by conversation.

HOW TO PROCEED IF THE CHILD BE BORN BEFORE THE ARRIVAL OF THE MEDICAL ATTENDANT.—It not unfrequently happens, subsequent to a first confinement, that with some females their labours are so rapid and short (two or three strong and powerful pains being sufficient to bring the child into the world) that it is quite impossible for any medical man to get to them in time for their delivery.

Under these circumstances, the friends are generally excited and alarmed. There is no occasion for this. All that is necessary to do is to see that the child is so placed that it shall obtain plenty of air.

Some nurses will tie the cord and separate the child. There is no objection to this, provided the child is alive, and respiration *fully* established. *But no nurse ought to be permitted to remove the after-birth.* This hint cannot be too strongly borne in mind ; for an injudicious interference with the after-birth might be attended with the most serious consequences.

TWINS.—If there should happen to be twins, the mother should not be made acquainted with the fact (if possible) till both children are born. This is an established practice with medical men, as mischief might ensue from the apprehension with which the patient might contemplate the second labour. Unfortunately, however, the attendants in a lying-in-room taken by surprise (when informed

by the medical man after the birth of the first of the existence of another child), often, by their incautious conduct, discover the fact prematurely to the patient. This, be it remembered, should ever be carefully guarded against for the patient's sake.

AFTER-PAINS. — About half an hour or so after delivery, a patient must expect pain again to occur. These pains, however, will differ from those which have just subsided ; as they are not attended with bearing down efforts, and are accompanied by a slight discharge : these are called "after-pains." They will continue off and on with more or less frequency, severity, and duration, for about eight-and-forty hours. In this respect, however, they vary much in different individuals ; but, whether mild or severe, they must be borne with patience, and must not give rise to anxiety, since they are useful and salutary. If, indeed, they should be violent, they are under the control of medicine, which will accordingly be ordered for that purpose.

These pains rarely occur with first children. In case they should, and the medical adviser should not be at hand to prescribe, for the ease of the patient, it might be well to mention that common house sand, salt, or oats, well heated and tied up in a cloth, may be applied to the belly with benefit. Where the sand and salt are painful from their weight, the oats will be found free from that objection—a bottle of hot water is also useful.

SECT. III.—FROM AFTER DELIVERY TO THE TIME OF
LEAVING THE CHAMBER.

ARRANGEMENT OF PATIENT'S DRESS, ETC.—The medical attendant having retired from the room, it will frequently happen that the nurse proposes to make her mistress comfortable, and if allowed will change the linen about her person, and alter her position in the bed; in effecting which she will perhaps lift her off the bed, or if not, place her in an *erect* or *sitting posture*, upon it. Nothing can be so improper, or more likely to induce serious consequences. It is the duty of the medical man himself to leave his patient comfortable, as it is called, and it is in his power to do this, without running any risk, or altering her situation in the bed, that is, if the previous directions about her dress have been attended to. Little things are often of great importance, and are sometimes found to be so, when it is too late.

An hour, or an hour and a half, however, having elapsed from the time of delivery, the necessary alterations about the bed and dress may be made. The soiled linen is to be removed, and the chemise and night-gown, previously folded around the chest, drawn down. The patient is then to be carefully moved to the upper part of the bed, in effecting which *the horizontal position is to be strictly preserved, and on no account, for one mo-*

ment, must the female be raised upright She must now seek a long and refreshing sleep.

MANAGEMENT OF THE CHILD IMMEDIATELY AFTER ITS BIRTH.—The infant warmly wrapped up in a flannel receiver by the medical man and given to the nurse, if it be cold weather, is to be dressed by a good fire. This is necessary, both because the temperature of the child's body at birth is several degrees below that of the adult, and because its power of retaining its warmth is also less.

The first thing to be done is to *wash* the child; and, as its body will be found covered with a white, greasy, curd-like substance, this must be removed, and with great care, particularly from the eyelids, groins, armpits, and from the folds in the skin. This is most easily accomplished with warm water, fine soap, and a soft sponge, the child having been previously well oiled. Sometimes the nurse will wish to use spirits of wine, or a little gin, especially to the head, under the idea that it prevents the taking of cold. It does neither good nor harm, so long as the head alone is bathed with it, but *warm* water is far preferable, and with a mild unirritating soap is fully efficient. If any of this secretion is not removed, it dries, hardens, irritates the delicate skin of the infant, and sometimes even produces severe excoriations.

The surface of the child's body having been thoroughly dried with a soft towel, the next thing

is to put up the remains of the navel string. Having been examined by the medical man previous to his leaving the chamber, it is presumed that its vessels are properly secured, and it is now to be protected from injury, until it separates from the body of the child, an occurrence which usually takes place somewhere between the fifth and fifteenth day from delivery. The mode is as follows:—A piece of soft old linen rag doubled, and about four or five inches in diameter, is to be prepared, and a circular hole cut in its centre, through which the cord is to be drawn. The cord being carefully folded up in this envelope, is to be laid on the abdomen of the child, and secured by what is called the belly-band, viz. a band of thin flannel, five or six inches broad, and long enough to go twice round the body. This ought to be fastened with strings, pins in any part of an infant's dress being objectionable.

The child is now to be dressed: and about this it is unnecessary to say more, than that it should be sufficiently warm; and not calculated to place the slightest restrictions upon the movements of the limbs; and in reference to the head-dress, that a thick muslin cap is all that is required, and more than this or anything that shall compress or restrain the free motion of the child's head is highly injurious.

DIRECTIONS FOR CERTAIN ACCIDENTS AND DISEASES
WHICH MAY OCCUR TO THE INFANT.

STILL-BORN.—The child may be born long before the arrival of the medical man, and the question then arises what is to be done? Nothing if he is near at hand, except allowing a free ingress of air to the child's mouth to prevent suffocation. If, however, medical assistance cannot be obtained for some time, then the cord may be divided, provided the child cry or breathe vigorously. This is to be effected by first tying the navel string with common sewing thread, three or four times doubled, about two inches from the body of the child, and again two inches from the former ligature, and then dividing the cord with a pair of scissors between the two. The *after-birth* and every thing else should be left, *without interference*, till medical aid can be given.

But sometimes the child comes into the world apparently dead, and unless the most active exertions are made by the attendants, is certainly lost. The superintendence of the means used devolves upon the medical man; but it would be often well if his assistants were already acquainted with the measures pursued under these circumstances, for they would be more likely to be carried into effect, with promptitude and success, than they now frequently are. And again, the still-born child is fre-

quently in this state from having been born very rapidly, and before the medical man can have arrived; it will be more especially useful, in such a case, that the attendants in the lying-in room should know how to proceed.

The various causes producing this condition it is unnecessary to mention.

The condition itself may exist in a greater or less degree: the infant may be completely still-born, with no indication of life, except, perhaps, the pulsation of the cord, or a feeble action of the heart; or it may make ineffectual efforts at breathing, or even cry faintly, and yet subsequently perish from want of strength to establish perfectly the process of respiration. Under all these circumstances a good deal can often be effected by art. In every instance, therefore, in which we have not positive evidence of the child being dead, in the existence of putrefaction, or of such malformation as is incompatible with life, it is our duty to give a fair trial to the means for restoring suspended animation; and as long as the slightest attempt at motion of the respiratory organs is evinced, or the least pulsation of the heart continues, we have good grounds for persevering and hoping for ultimate success.

The measures to be employed to restore a still-born child will be a little modified by the circumstances present.

If there is no pulsation—no beating in the cord,

when the child comes into the world, the ligatures may be applied, the cord divided with the scissors, (as already described,) and then the means for its restoration made use of detailed below -- viz., inflation of the lungs, and perhaps the warm bath. If, with the above circumstances, the child's face be livid and swollen, some drops of blood should previously be allowed to escape before the ligature is applied to that part of the navel string which is now only attached to the child.

If there is pulsation in the cord, but respiration is not fully established, it must not be divided ; and as long as pulsation continues, and the child does not breathe perfectly and regularly, no ligature should be applied. The first thing to be done here is to pass the finger, covered with the fold of a handkerchief or soft napkin, to the back of the child's mouth to remove any mucus which might obstruct the passage of air into its lungs, and at the same time to tickle those parts, and thereby excite respiratory movements. The chest should then be rubbed by the hand, and a gentle shock given to the body by slapping the back. If these means fail, the chest and soles of the feet must next be rubbed with spirits, the nostrils and back of the throat irritated with a feather previously dipped in spirits of wine, and ammonia or hartshorn may be held to the nose.

Inflation of the Lungs.—These means not having been successful, and the pulsation in the cord

having ceased, the infant must be separated, and inflation of the lungs resorted to. This is to be effected gently and cautiously, as follows.

The child, wrapped in flannel, is to be laid on its back upon a table placed near the fire. Its head is to be slightly extended, and the nostrils held between the fingers and thumb of one hand, while with the fingers of the other slight pressure is to be made upon the pit of the stomach, so as to prevent the air from passing into that organ. The lungs of the child are now to be filled with air, by the operator applying his own lips — with a fold of silk or muslin intervening, for the sake of cleanliness — to those of the child; and then, simply blowing into its mouth, he is to propel the air from his own chest into that of the infant. Previously, however, to his doing this, he should make several deep and rapid inspirations, and finally a full inspiration, in order to obtain greater purity of air in his own lungs.

When the chest of the child has been thus distended, it is to be compressed gently with the hand, so as to empty the lungs; and in this way the inflation, with the alternate compression of the chest, must be repeated again and again, until either the commencement of *natural respiration* is announced by a sneeze or deep sigh, — or, until after *long, continued, steady, persevering*, but unavailing efforts to effect this object, shall have removed all ground of hope for a successful issue.

While these efforts are being made, some other individual must endeavour to maintain or restore the warmth of the infant's body, by gently but constantly pressing and rubbing its limbs between his warm hands. And after respiration is established, the face must still be freely exposed to the air, while the warmth of the limbs and body is carefully sustained.

It will sometimes happen — and to this circumstance the operator should be fully alive — that when the child begins to manifest symptoms of returning animation, its tongue will be drawn backward and upward against the roof of the mouth, filling up the passage to the throat, and preventing further inflation of the lungs. This is to be remedied by the introduction of the fore-finger to the upper and back part of the child's tongue, and gently pressing it downward and forward, by which the difficulty will be removed, and the air again passes.

The warm Bath. — More reliance may be placed upon the above measure to restore animation, than upon the warm bath. Still this is sometimes useful, and therefore must not be neglected. While inflation is going on, the bath may be got ready ; then resorted to ; and if unsuccessful, inflation may, and ought again to be followed up.* If the bath is use-

* We should not relinquish our endeavours at resuscitation under two or three hours, or even longer ; and if ultimately successful, the state of the infant should be carefully watched for two or three days.

fu, at all, it will be so immediately upon putting the infant into it — respiration will be excited, followed by a cry ; and if this does not occur at once, it would be wrong to keep the child longer in the bath, as it would be only losing valuable time, which might be devoted to other efforts. The temperature of the bath should be about 100 degrees ; and if, upon plunging the infant into it, it fortunately excite the respiratory effort, it should then be taken out, rubbed with dry but hot flannels ; and when breathing is fully established, laid in a warm bed, or, what is still better, in its mother's bosom,— letting it, however, have plenty of air.

INJURIES RECEIVED DURING BIRTH. — If a labour be long and tedious, the head and body of the child may be bruised and disfigured.

The shape of the head is frequently altered by the compression it has undergone ; so that it may be elongated, and measure from the chin to the back of the head as much as six or seven inches. This always excites surprise, sometimes apprehension, in the minds of the attendants : there is no ground for it. It must be allowed to regain its natural shape without interference.

Tumours or swellings upon the head are very common. They arise from pressure upon the part during the labour. The only treatment that is required, or safe, is freedom from all pressure, and the application of cold lotions composed of brandy or

vinegar and water. The swelling will gradually subside. It will be right, however, to direct the attention of the medical man to this circumstance

The *face* may be frightfully disfigured from the above cause, exceedingly black, and the features distorted. Nothing is necessary here; in a few days the face will recover its proper appearance.

RETENTION OF URINE.—Occasionally an infant will not pass any urine for many hours after its birth. This most frequently arises from the fact of none being secreted. In the last case of this kind that I was called to, three days had elapsed since birth, and no urine had been passed: it proved that none had been secreted. Sometimes, however, it is the effect of another cause, which the use of the warm bath will be found to remove, which should always therefore be employed four-and-twenty hours after the birth of the infant, if it has not by that time passed any water.

It now and then happens, but fortunately very rarely, that some physical obstruction exists. It is always important, therefore, for the nurse to pay attention to the above point; and it is her duty to direct the attention of the medical man to the subject, if anything unusual or unnatural be present. The same observation applies to the *bowels* also and if twelve hours pass without any motion, the parts should be examined.

SWELLING OF THE BREASTS.—At birth, or two or three days subsequently, the breasts of the infant will frequently be found swollen, hard, and painful, containing a fluid much resembling milk. Nurses generally endeavour to squeeze this out, and thus do great mischief; for by this means inflammation is excited in the part, and sometimes abscess is the result.

If the breasts are simply slightly enlarged, it is unnecessary to do anything more than rub them occasionally, and very gently, with warm almond oil, and a little time will restore them to their proper size.

If, however, they are inflamed, hot, painful, with a red surface, and unusually large, a bread and water poultice must be applied every three or four hours, which will generally prevent either the formation of matter, or any other unpleasant consequence. In a few days, under this treatment, they will usually subside, and be quite well.

DISCHARGE FROM THE EYES.—*Its importance.*—About the second or third day after the child's birth, an inflammation sometimes attacks the eye, which is of considerable consequence. The more so, from its commencing in a way not calculated to excite the attention or alarm the fears of the mother or nurse. The child cannot express its sensations, and the swelling of the eye conceals the progress of the disease; so that serious mischief is frequent-

ly done before the medical man sees the patient. In the first place, the inflammation is not immediately noticed; and in the second, the measures employed are frequently insufficient to check its progress: hence it causes more blindness (I refer to the lower classes of society more particularly) than any other inflammatory disorder that happens to the eye; and the number of children is very considerable whose sight is partially or completely destroyed by it. The parent and nurse are apt to suppose, when this inflammation first appears, that it is merely a cold in the eye, which will go off; and the consequences which I have just mentioned take place, in many cases, before they are aware of the danger, and before the medical man is resort ed to for assistance.

I only desire, in mentioning this complaint, to inform the attendants of the lying-in-room of its great importance, that it may not be trifled with, that upon its first approach the physician may be informed of it, and that the treatment he directs for its cure may be sedulously and rigidly followed.

Symptoms. — The inflammation commonly comes on about three days after birth; but it may take place at a later period. It may be known by its commencing thus:— When the child wakes from sleep the eyelids will be observed to stick together a little; their edges will be redder than natural, and especially at the corners; the child experiences pain from the access of light, and therefore shuts

the eye against it. A little white matter will also be observed lying on the inside of the lower lid. After a short time the lids swell, become red on their external surface, and a large quantity of matter is secreted, and constantly poured from the eye, the quantity of discharge increasing until it becomes very great.

But enough has been said to point out the importance of the disease, and the signs by which it may be recognised at its first approach.

Treatment.—Keeping the eye free from discharge, by the constant removal of the matter secreted, is what the medical man will chiefly insist upon ; and without this is done, any treatment he may adopt will be useless : with it, there is no doubt of a successful issue of the case, provided his attention has only been called sufficiently early to it.

HARE-LIP.—This is a blemish too well known to require a formal description. The questions most interesting to the mother in relation to it are,— How is her child to be nourished that is born with it ?—and when ought an operation to be performed for its removal ?

The mode of feeding the infant.—If the defect is but trifling, the infant will be able to suck, provided the mother's nipple is large, and the milk flows freely from it. If this is not the case, the

difficulty may be obviated by using the cork-nipple shield. I have known this to answer the purpose admirably, when the mother had previously despaired of nursing her infant, from the nipple being too small for it to grasp it.

If, however, the defect exists in a still greater degree, feeding by means of the spoon must be resorted to ; the greatest care being necessary as to the quantity, quality, and preparation of the food.

Caution in reference to the operation.—With regard to the operation for the removal of this deformity, I would strongly warn parents against desiring its too early performance. Various considerations contribute to make the distressed parents wish this But very seldom indeed — except the deformity be very great, and implicating other parts beside the lip — will the operation be required, or ought to be resorted to, before the second year and a half of the infant's life ; and for this very cogent reasons exist. Convulsions may thus be induced, which often terminate fatally.

The most proper age for removing this deformity by operation is from that of two years and a half to four years.

BLEEDING FROM THE NAVEL-STRING.—Bleeding from the navel-string will sometimes take place hours after it has been supposed to be carefully se-

cured. This will arise either from the cord being carelessly tied, or from the cord being unusually large at birth, and in a few hours shrinking so much that the ligature no longer sufficiently presses on the vessels. In either case, it is of importance that the attendants in a lying-in-room should understand how to manage this accident when it occurs, that it may not prove injurious or fatal to the child.

The mode of arresting the bleeding.—The clothes of the child and the flannel roller must be taken off;—the whole cord without delay must be unwrapped; and then a second ligature be applied below the original one (viz., nearer to the body of the infant), taking great care that it shall not cut through the cord when drawn very tight, but at the same time drawing it sufficiently tight to compress the vessels.

The ligature should be composed of fine linen thread, three or four thicknesses, and not of tape or bobbin, or any substance of this nature, as it cannot be relied on for this purpose.

ULCERATION, OR IMPERFECT HEALING OF THE NAVEL.—The cord separates from the navel generally sometime between the fifth and fifteenth day from delivery, and the part usually heals without giving the slightest trouble.

This, however, is not always the case, for sometimes a thin discharge will take place; and if the

part be examined, will be found to proceed from a small growth about the size, perhaps, of a pea, or even less. This must be removed by applying a little powdered alum, or slightly touched with bluestone, if necessary; and afterwards dressed with calamine cerate.

At other times, though fortunately very rarely, excoriation of the navel and the parts around takes place, which quickly spreads, and assumes an angry and threatening character. If, however, the attention of the medical man is called to it early, it will always do well: until his directions are given, apply a nicely made bread and water poultice.

BLEEDING FROM THE NAVEL.—Sometimes a day or two after the cord separates, or at the time of separation, bleeding takes place from the navel. Fortunately this very seldom occurs; indeed it is very rarely met with; and I only mention it to observe that, upon its occurrence, the point of the finger should be placed over the part, and pressure steadily applied until medical assistance is obtained.

Now and then, in these cases, a growth sprouts up and bleeds. Let this be touched with lunar caustic, or any other astringent application, or let pressure be employed, still it will bleed,—not freely or in a stream, but there will be a constant drain from the part; and the infant, as a consequence, will waste and be brought to death's door. Excise

it, it will only make matters worse. The treatment in this case consists in simply winding a piece of very narrow tape round the growth, and leaving it untouched. The bleeding will soon cease ; the fungus will sprout over the upper margin of the tape : in a very short time it will, as it were, strangle the disease, and the fungus subsequently falling off, a complete cure is accomplished.

JAUNDICE.—It frequently happens, during the first or second week after birth, that the skin of the child becomes very yellow, and it has all the appearance of having the jaundice. This gives rise to great distress to the parent when she perceives it, and she becomes very anxious for the medical man's next visit.

Now, ordinarily, it is of no consequence, commonly disappearing spontaneously, and requiring no medical treatment. If, however, it does not go off in two or three days, a tea-spoonful of castor oil should be given once, or oftener if necessary.

It is of course possible for an attack of real jaundice to occur at this early period, and a disease of a very serious nature will then have to be dealt with ; but except as a consequence of malformation (a very infrequent occurrence) it is not likely to arise ; and therefore jaundice during the first and second week after delivery need not excite alarm.

TONGUE-TIED.—*From what it arises.*—This arises from the bridle under the tongue being so short, or its attachment to the tongue extended so near the tip, as to interfere with the motions of the organ in sucking, and, in after years, in speaking. It is a rare occurrence, although nothing is more common than for medical men to have infants brought to them supposed to be labouring under the above defect.

How its existence may be determined.—The best guide for a parent to determine whether it exist or not, is for her to watch whether the infant can protrude the tip of the tongue beyond the lips ; if so, it will be able to suck a good nipple very readily, and nothing need or ought to be done. No mother would unnecessarily expose her infant to an operation, which, unless very carefully performed, is not altogether unattended with danger ; and, if she suspects any defect of this kind to exist, she has only to observe the circumstance mentioned above to satisfy her mind upon the subject.

MOLES AND MARKS ON THE SKIN.—The supposed influence of the imagination of the mother, in producing the above appearances, has been fully discussed. We have now to inquire into the probable effect of their presence upon the health of the child.

They may be divided into two classes : the brownish mole, and claret stain ; and small but some-

what elevated tumours, either of a dark blue livid colour, or of a bright vermillion hue.

Moles and stains.—They are of no importance, as far as the health of the infant is concerned. If situated in the face, however, they frequently cause great disfigurement, as the claret stain, which may be seen sometimes to occupy nearly half the face. But they happily do not increase in size, and as an operation for their removal would only cause an equal, if not greater deformity, they ought to be left alone.

Coloured spots or tumours.—These vary in their number, size, and situation. The same child is sometimes born with many of them. They are not only found on the skin, but on the lips, in the mouth, and on other parts of the body.

These also sometimes remain stationary in their size, unless, indeed, they are subjected to friction or pressure. But as they frequently require surgical aid,—in which case, the earlier the application of remedial measures the less severe in their kind, and the greater the probability of a speedy and successful result—so is it *always* important for the mother *earlier* to obtain a medical opinion, that the measure of interference or non-interference may be decided.

PUTTING THE INFANT TO THE BREAST.—Immediately after the infant is dressed, many nurses are in the habit of dosing it with castor oil, or honey of roses and almond oil. It is objectionable on many accounts; it is quite uncalled for so early and it may be altogether unnecessary, if they only wait. The infant should be put quietly to sleep, and allowed to repose for four or five hours, when the mother having also obtained some sleep, it is proper to place the child to the breast. This should always be done within the first four-and-twenty hours, partly to draw out and form the nipple before any hardness of the breast occurs and renders that difficult, and partly to encourage the flow of milk; for the very effort made by the infant to obtain it, will excite its secretion.

It has been supposed by some that the milk first secreted is improper for the child, that it irritates its bowels. The fact is, that there is a difference in its quality to that which is soon after poured forth; but then it is a difference which nature has ordained and designed for a wise purpose. For the bowels of the little one when born are loaded with a dark black secretion, of which it is essentially necessary they should be relieved. Now the means for its removal are found in the aperient qualities of the milk which is first secreted in the breast of the parent; so that instead of being injurious when the child is allowed to take it, it is

highly necessary. Should the child, therefore, **not** get the first draught of the mother's breast from being put to a wet-nurse, or from any other cause, or should the abdomen, even some five or six hours only after birth, become full, the child fretful, and no evacuation take place, a gentle purgative must be given, and half a drachm of castor oil is best. The fact is, there is generally no secretion of milk for the first twelve hours. About the end of this time a pricking sensation will be felt in the bosom, which gradually enlarging, a full supply is produced in twenty-four hours.

Not so, however, in *first* confinements; there is rarely any quantity secreted before the *third* day. At this period, now and then a little later, the breasts become hard, swollen, and very soon painful. As the process of secretion proceeds, the breasts more swollen than ever, appear to be made up of large, extremely hard lumps or knots, and become very heavy and very tender. After a time the milk is at "its height," as it is termed, and if the breasts be fomented or gently pressed, a small quantity of milk will be seen oozing from the nipples. When the infant is placed at the breast, the action of suckling will be attended with great pain, but followed by considerable relief; and as the milk flows, the hardness will diminish, the general swelling subside, and the milk being freely and frequently drawn off, the feelings of the patient will become more comfortable, and all pain re-

noved; the breasts will be distended only when some few hours have elapsed since they were drawn, and thus *lactation* will be established.

The *difficulty* which the infant experiences in drawing out the nipple when the breast is hard and swollen is very great; and various measures have been suggested to obviate this. The mode I always propose is as follows: first, foment the hardened breast with flannels wrung out in warm water—or take small wooden bowls soaked in warm water, wrap them up in flannel, and then place them over each breast, or apply nicely-made bread and water poultices. Any of these means will promote the easy flow of the milk. Having done this, let the nipple be drawn either by a vigorous child of three or four weeks old—by a grown person—or by the following method:—Take a pint decanter, or a wine-bottle with a smooth mouth, fill it to the neck with boiling water, pour out this water almost immediately, and, provided it is not too hot, apply the mouth of the decanter to the flattened nipple. As the decanter cools a vacuum will be created, and the nipple will be elongated in its neck; retain it thus a few minutes, when the bottle is to be gently removed by depressing it, and immediately apply the child.

Various kinds of breast-pumps, and other machines have been invented, but none answer the purpose so well as the simple warm bottle—the mouth of another child—or that of a grown person

It is unnecessary for the child to take any nourishment until ten or twelve hours after birth. Usually, at this time, the mother will be able to supply it with its natural nutriment; should not this, however, be the case, as will always happen with first labours, the child must be fed every four or five hours with a small quantity of thin gruel, or with a little milk sweetened with sugar; to be left off as soon as lactation is fully established. And now it is proper for the mother to support her infant independent of any other nutriment. The suckling should be performed at regular intervals of about four hours, during the night as well as day. And during sleep, the nipple ought not to be allowed to remain in the infant's mouth, as is too often the case; nor, during the day, the child put to the breast every time it cries, to quiet and sooth it. Both much interfere with the health of the infant, the stomach is kept constantly loaded, and unable therefore to digest its contents;—time must be given for this purpose, and an interval of four hours is not too much. A child thus nursed will be found less troublesome and fractious than one that is hushed by the breast at every cry, and will awaken with great regularity as the time for its meal approaches.

THE BLADDER.—If the labour has been tedious some difficulty may be experienced on the following day in passing the water, and if fomentations do

not effect relief, the medical man must be informed of it at his next visit. This inability occurs very frequently, and a lady should be very careful that she does not deceive herself in this particular.—Passing a little water drop by drop does not empty the bladder, and she may rest assured, assistance is demanded, if such be the case. It would be a sadly mistaken delicacy that kept a patient from hiding such a circumstance from her attendant, and if too long delayed might be followed by the most disastrous consequences to herself.

THE BOWELS.—On the evening of the second, or morning of the third day, some aperient medicine should be taken, and this must be given, even if the bowels have been previously moved, for they will be only *partially* relieved. Castor oil is the best medicine. Fill two thirds of a wineglass with milk, coffee, or mint-water, and upon this pour a large tablespoonful of the oil, which may be thus swallowed without being tasted. If it does not have the desired effect after four or five hours, the dose must be repeated. If the stomach will not retain the oil, some mild aperient draught may be substituted, or the common domestic lavement.

THE DISCHARGE.—The liberal use of tepid milk and water as a wash during the existence of the discharge will be necessary, and give rise to great comfort. This must be delicately and care-

fully managed by the nurse. Let no lady permit the prejudices of the latter personage to interfere and prevent this. In general her dictum upon such a point, however unreasonable it may appear, is received and submitted to by the young married woman, because she is supposed by her experience to be fully informed upon all such points. Now, I could not have believed it, except that a very few weeks since it happened to me while in attendance with a highly respectable lady during a miscarriage, to hear from her, while giving directions on this very matter, that her nurse in the country, never permitted anything of the kind until a full fortnight after delivery, lest she should take cold. Was anything ever more preposterous, and something much worse! The milk and water then should be used three or four times a day for the first week, and gradually left off as the discharge diminishes.

It is right also to observe that this discharge is sometimes *very profuse*, and may continue thus for many days—nay weeks, after delivery. When such is the case, the *medical attendant* should be *early informed* of the circumstance, or serious consequences to the health of the patient may follow.

THE DIET AND MANAGEMENT FOR THE FIRST THREE DAYS.—For the first three days after delivery the diet ought to be small in quantity and more simple

in quality than before labour. The sudden and great change in the habits and situation of the patient, from one of activity to the perfect quietude of the chamber, renders this necessary ; as also, the possible existence of a more or less excitable condition of the whole system, the effect of the labour. Not, however, that I consider the lying-in-room, a sick-room, or approve of a very usual plan of treatment. For it is a frequent but very injurious practice for nurses, for several days after delivery, to keep the bed-room curtains drawn close—to increase the number of blankets—and to be continually giving everything as hot as can be swallowed, deluging the patient's stomach with water-gruel and slops with a view to promote perspiration, and prevent her taking cold. This is the most direct way to produce the evil so much dreaded, for it follows as a natural consequence, that by these means, she is rendered more than ever susceptible to the impression of cold—is sure to be much debilitated, and a troublesome species of fever will be induced, which it may be found difficult to remove.

Coffee in the morning, a light pudding for dinner, coffee again, or tea, in the evening, and moderate quantities of gruel in the intervals—if the patient desire it—is the simplest and best diet at this time, and all other kinds of nourishment must be abstained from during these first three days.

The body and mind of the patient must be kept

at perfect rest—and the lying-in-apartment cool, well ventilated, and free from visitors.

THE FOURTH DAY.—The fourth day having arrived, and everything going on well, the patient may take the wing of a chicken, or what is better, a mutton-chop, but must not have wine, porter, or any stimulant. Her beverage should consist of equal parts of barley-water and milk, which will allay thirst, relieve any sinking of the stomach, and produce milk better than anything else.

THE FIFTH DAY.—On the fifth day she may be removed from the bed—the heat of which is relaxing—to the outside of it, or to a sofa previously placed at the side of the bed; but on no account must she give the *slightest assistance* in her removal, and when on the sofa must strictly keep the *horizontal position*. Indeed for *three weeks* after delivery an almost constant compliance with the latter direction is highly important. Among the poorer classes of society, who get up very soon after delivery, and undergo much fatigue, "*the falling down of the womb*" is a very common and distressing complaint. It is the effect, simply, of their not being able to keep the recumbent posture long enough. I cannot too strongly endeavour to impress upon the recollection of a female the importance of this hint, the more especially as

some nurses are the first to induce the lying-in patients to break it.

THE TENTH DAY.—The usual mode of diet may now be resumed, except that in addition to the former beverage, a pint of good sound ale may be taken daily, provided it is found to agree with the stomach.*

It matters little from this time, whether the patient remains in the lying-in-chamber or not, as, if a sitting room adjoins it, it is better for her to be wheeled into it for the day, returning to the chamber in the evening. The atmosphere of which will thus be preserved purer and more refreshing to sleep in. This plan however can only be adopted where the bed-room opens into a sitting room, as it would be quite out of the question to remove the patient through any passage, or to another floor. And she should be wheeled from her bed-room, *lying* on the sofa; not *walk* from it.

It is never safe for her to join her family before the expiration of the third week—and the *month* from her delivery having terminated, she gradually resumes her accustomed domestic duties.

* The free use of cocoa is vastly preferable to that of ale, which is seldom needed in the country.

CHAPTER VI.

SUCKLING.

SECT. I.—MANAGEMENT OF THE NIPPLES PRIOR TO DELIVERY

EVERY female, especially in a first pregnancy, ought during the six weeks prior to her confinement *to prepare* the nipples for nursing. The skin covering them is generally so thin and irritable, that suckling soon makes them tender and excoriated, and if this irritability is not diminished, and the delicate skin rendered thicker and more callous before labour comes on, nursing will frequently be obliged to be given up very soon after.

The plan to be adopted is simple enough :—all pressure upon the nipple and bosom must be most carefully avoided, flannels or any thick covering must be laid aside, and the nipple itself must be washed, and rubbed three or four times a day with green tea, brandy, or with the infusion of oak or pomegranate bark, and exposed to the air each time for ten minutes at least.

If the above remedies should not succeed, the following astringent lotion will:—Four grains of the sulphate of zinc, to one ounce of distilled rose-water; to be used liberally.

These means must be regularly and perseveringly employed up to the day of confinement, and will accomplish the object desired—the prevention of sore nipples.

SECT. II.—SORE NIPPLES.

The previous directions having been neglected, one of the most early and troublesome attendants upon suckling may arise—soreness of the nipples.

I. *If they are only tender and fretted*, the strong infusion of green tea, brandy, or the lotion of zinc just mentioned—ringing the changes upon each, using each daily in its turn, will quickly harden the skin, and remove its irritability. If not, try a lotion containing one grain of the nitrate of silver dissolved in one ounce of distilled rose-water. These applications should be used freely and frequently during the day, and the part exposed to the air afterward.

II. *If they are tender and fretted, but also hot, dry, and very painful to the touch, and yet not chapped*, the stimulating applications before advised would only aggravate the mischief. A bread and water poultice should be first applied, changed

every three hours, and fomentations of warm water, or decoction of poppy-heads after each poultice is removed.

When the unnatural heat, and great pain of the part is relieved, it must be dressed with a little spermaceti ointment spread upon thin linen or lint.

III. From the friction, however, of the child's tongue and gums, *the skin may have become excoriated, and cracks formed upon the nipple, or around its base.* Every time the infant sucks they bleed, and the mother suffers exquisite pain.

The first object in the treatment is this: that the infant shall obtain its nourishment from the breast without its mouth coming in contact with the nipple. This is accomplished by means of shields made of glass, wood, ivory, or silver. The shield is neatly covered with an artificial, or prepared cow's teat, through which the child sucks without biting or irritating the nipple.

But this contrivance frequently fails, not because it is not good, but, because it is badly managed. When the teat is sewn on the shield its extremity should not extend beyond its apex more than half or three quarters of an inch; for if it projects more, the child will get the teat between its gums, press the sides of the teat together, and thus prevent the passage of the milk through it. The teat should also closely cover all the orifices to which it is stitched; for if not, air will pass in, no va-

euum will be formed, and the child will draw nothing but air.

Of late I have employed a shield with a *cork nipple* as a substitute for the prepared teat. The nipple shield is made of ivory, or box-wood, with a small ivory tube for the passage of the milk. The cork nipple is placed upon the ivory tube, and secured by means of a small collar which screws over the nipple on to the shield. The cork being of a particularly fine texture, is supple and elastic, yielding to the infant's lips while suckling. The cork being perfectly harmless, more cleanly and durable than the teat, and the ivory tube through its centre obviating the difficulty frequently met with from the misapplied teat, I would strongly advise its use.*

For the cure of the excoriated and chapped nipple, any of the following remedies will be found useful:—Half an ounce of brandy to eight ounces of rose-water;—four grains of the sulphate of zinc, dissolved in one ounce of rose-water;—two grains of the sulphate of copper, in one ounce of camphor julap;—or one grain of the nitrate of silver, in one ounce of rose-water. These lotions by means of linen dipped into them, are to be applied frequently. If they fail, the surface of the sores or cracks may be *slightly* touched once a day

* It is the invention of M. Darbo, of Paris, and is sold by Weiss & Son, 62 Strand; and in New York, by James Weir, 248 Grand street.

with the nitrate of silver in substance, and in the intervals the part kept smeared with an ointment, composed of two drachms of honey, and one ounce of spermaceti ointment, or half a drachm of Peruvian balsam, and one ounce of spermaceti ointment.

The nipple should always be washed with a little milk and water, both before and after sucking, which it will be remembered is to be effected through the shield.

These measures are commonly successful; if, however, they should not succeed, and the parent's health suffer from the continued pain and irritation attendant upon nursing, she must obtain either a wet nurse, or rear the child by an artificial diet.

SECT. III.—DRYING UP THE MILK.

It may be necessary from the delicate health of the mother—local defect, the nipple, for instance, being too small or obliterated by the pressure of tight stays—death of the infant, or some equally urgent cause, to dry up, or “backen the milk,” as it is popularly called.

For this purpose, if the breasts are only moderately hard, easy, and but little distended with milk, they must not be emptied; for this would encourage further secretion, and they would soon

fill again. If, however, they are very hard and painful, and give much uneasiness from their distension, they must be partially emptied, so as just to relieve the distension—nothing more; and this is to be repeated as often as is absolutely necessary.

It is a very frequent practice to apply cold evaporating lotions to the breast. It is true they may produce a rapid dispersion of the milk, but they ought never to be resorted to, as they frequently give rise to symptoms of an alarming and dangerous character. The best and safest local application consists in the following liniment:—Compound soap liniment, three ounces; laudanum, three drachms; camphor liniment, one drachm;—or if this is found too irritating, compound soap liniment alone. Either of these liniments must be applied warm, and constantly, by means of several layers of linen or flannel, covered by a piece of oiled silk; and the breast gently pressed or rubbed for five or ten minutes, every four or five hours, with warm almond oil.

A gentle aperient should be taken every morning, and, if necessary, at night, the object being to keep the bowels slightly relaxed. The diet must be very scanty, and solid nourishment only taken.

Following up this plan, the distress arising from the extreme distension of the breasts, if it have been present, will be removed; although several

days will transpire before the milk is thoroughly dispersed, or the remedies can be discontinued.

SECT. IV.—UNCONTROLLABLE FLOW OF THE MILK.

This occasional evil seems to arise either from some original defect in the structure of the nipple itself, or from the milk tubes, which terminate at the nipple's point, having lost their elasticity, and therefore their power of retaining the milk; so that the mouths of these little tubes never being closed, during the intervals of suckling, there is a constant draining of milk from them. This uninterrupted flow not only proves a source of great annoyance to the patient, but, after a time, seriously affects her health.

The means proposed to remedy this defect have been many, but I am obliged to confess their success infrequent. Benefit may be obtained by frequently applying a lotion containing one drachm of alum, dissolved in a pint of spring water, or thirty grains of the sulphate of zinc, in a pint of the decoction of oak-bark. The breast must be exposed for at least ten minutes after the application of the lotion, and the nipple washed with milk and water before the child is put to it. A glass receiver made for the purpose of catching the milk, must be constantly worn, and the breast have but slight clothing.

SECT. V.—MILK ABSCESS, OR BROKEN BREAST.

No evil in the lying-in-room is more dreaded by the patient than a bad or broken breast. And the reason why it is so frequent is, either that false delicacy and fear on the part of the patient, lest the breast should be examined, almost constantly, induce her to submit its management to the nurse ; or, the nurse herself supposing that she is equal to the task, the physician is not consulted until so much mischief is done that he can but in part repair it. Inadequate means are thus advised and persevered in, until the time for the successful application of the proper remedies is irretrievably lost.

The fact is, that there is no inflammatory complaint which requires more judicious and active treatment than that which attacks this organ. On this account, not a moment is to be lost in temporizing ; for an impression must be made, and that quickly, on the disease, or all efforts will be unavailing. And again, there is too frequently a want of perseverance and conformity, on the part of the nurse, to the prescriptions of the medical attendant, after he has seen the breast. Both these circumstances, then, should be counteracted by the good sense and vigilance of the patient.

But she cannot accomplish this desirable purpose unless some hints are given her on the subject. This is what I now propose ; not to enter upon a full

detail of the treatment of abscess of the breast, but only to point out in what the general management consists, that she may be able to carry out fully the intentions of the medical attendant, so that they may not be thwarted by ignorance on the one hand, or a want of proper diligence and perseverance on the other.

Inflammation of the breast, terminating in abscess, may take place at any period of nursing; but it is more readily excited within a month after delivery. It sometimes occurs after a first delivery, upon the first coming of the milk; most frequently, however, about the third or fourth week.

1. How to prevent a bad breast upon the first coming of the milk.

About the third day after delivery, in a first confinement, and occasionally in subsequent confinements also, the breasts become hard, swollen, and very soon painful. And as the process of the secretion of the milk proceeds, the breasts, more swollen than ever, appear to be made up of large and extremely hard lumps or knots, and become very heavy and very tender. After a time the milk is at "its height," as it is termed; and if the breasts be fomented or gently pressed, a small quantity of milk will be seen oozing from the nipples. When the infant is placed at the breast, the act of sucking will be attended with some degree of pain, but followed by considerable relief; and as the milk

flows, the hardness will diminish, the general swelling subside, and the milk being freely and frequently drawn off, the feelings of the patient will become more comfortable, and all pain removed ; the breasts will be distended only when some few hours have elapsed since they were drawn, and thus *lactation* will be established.

This is the usual mode. But it may happen that from some mismanagement, from the flatness of the nipple, or because some cause prevents the milk running freely, — the distension of the breast is not relieved ; it gets harder, heavier, larger, extending into the armpits, and more painful than ever ; inflammation ensues — a bad breast is threatened. To prevent this, the following treatment should be adopted : —

The bowels kept relaxed by saline aperients ; the thirst allayed by effervescent saline draughts, and no other fluid taken ; the breasts fomented every third hour, for five minutes, with flannels wrung out in warm water ; then gently and tenderly rubbed with a liniment, warmed, and composed of one ounce and a half of soap liniment and three drachms of laudanum ; and afterward each breast completely enveloped in a large and well-applied warm bread and water poultice. And last of all, the breasts must be supported by a large silk handkerchief passed under each, and then tied over the neck, so as entirely to prevent their hanging by their own weight.

After the above measures have been pursued perseveringly for six-and-thirty hours,—and the principal points to which the attention of the mother should be directed are, the regular fomentation of the breasts, the gentle friction with the liniment, the application of the warm large poultices, well made, not so dry that they will irritate, and not so moist that they will make her wet and miserable; and last of all, though not least, the well-applied support,—I say, after these means have been efficiently employed for six-and-thirty or eight-and-forty hours, the breast will begin to mend; great relief will be experienced after the application of the poultices, and, when taken off, that part which was next the nipple will be found saturated with milk. From this time they must be drawn regularly by the attendant, or by means of a pump; and the extreme swelling and tension having somewhat subsided, the child will be able to grasp the nipple, to draw the milk, and, if regularly applied, prevent any injurious accumulation.

If the breast subsequently continue lumpy and hard, the liniment should still be rubbed every four hours, and in the intervals a piece of flannel, soaked in some of it, warmed, should be laid over the breast, which is to be covered by a piece of oiled silk, to prevent evaporation and keep the part nicely moist. And thus, by proper management, abscess, or broken breast, at this period, may and ought to be prevented

2. *How to prevent a broken breast when threatened about the third or fourth week.*

This complaint much more frequently occurs about three or four weeks after delivery, or even after the female has left the lying-in-room. It is at this time generally caused, either by the direct application of cold, by the pressure of the stays, or is a consequence of sore nipples. I have elsewhere pointed out how the latter may be avoided, or if produced, cured.

And here I would observe, that as soon as a lady feels any uneasiness, heat, tension, or any thing like a lump forming in the bosom, or that the child has the slightest difficulty in drawing the milk, the medical man should at once be informed of it, and no time lost in trying this little remedy, or that :— the early application of the proper remedies is of vital importance here.

The progress of the case before matter forms, and when remedies will be of avail to prevent its occurrence, will be this :— the part will enlarge, become tense, heavy, and painful, and the surface will soon appear red ; or the enlargement will be irregular, and seem to consist of one or more large lumps, situated in the substance of the breast ; this difference arising from the particular part of the breast which is affected. The milk in either case will be partly suppressed, or altogether so.

The means to prevent the inflammation terminating in an abscess will consist in the application of

leeches to the part so long as there is pain ; the exhibition of saline purgatives ; a low and dry diet ; keeping the inflamed breast from hanging down ; gentle friction with the soap and opium liniment, and preventing the over distension of the breast from milk by its occasional abstraction.

The leeches.—So long as the pain returns, half a dozen or more leeches must be applied.

Saline purgatives.—These are essentially necessary, so as to produce three or four watery motions in the four-and-twenty hours. And if this is not effected, the medical attendant ought to be informed of it.

Low diet.—A spare and dry diet is called for. This diminishes the quantity of blood sent to the breast, and thus lessens the amount of distension and milk secreted.

Gentle friction.—This is to be effected with a liniment, composed of three fourths of soap liniment and one fourth of laudanum. A little should be poured into a saucer and placed upon the hearth to warm, and then be very gently rubbed over the breast for about four or five minutes. After this a piece of flannel, the size of the breast, with a hole in the centre for the nipple, is to be soaked with the liniment, and put upon it, and then covered by oiled silk to prevent evaporation ; and this is to be repeated every three hours. The breast at this time is better without a poultice.

Drawing the milk.—This ought only to be re-

sorted to when the breast is painfully distended with milk ; because the very act of doing this promotes further secretion. The object here is just to relieve the over distension, nothing more ; and it is at this period to be accomplished gently and delicately by the nurse only, as the efforts of the infant would be likely to fail ; or if not, so violent as to be productive of mischief.

Keeping the breast from hanging down. — This is an important point to attend to,— may be easily accomplished,— and if well managed, the ease and comfort arising from it will be manifest enough. For this purpose the breast may be suspended in a silk handkerchief from the neck, and thus firmly and securely held, as in a sling. Even when the liniment is being applied, the hand should be passed under the breast for its support ; so that it should at no time be permitted, in its present large and heavy condition, to hang by its own weight. The patient will be easiest in the bed, or on the sofa.

These measures, when fairly applied, and perseveringly followed out, prevent the formation of matter ; the inflammation subsides ; a bad breast does not take place ; the patient perfectly recovers, and is able to suckle her infant as well with this breast as the other.

But suppose the formation of the abscess is unavoidable, and matter forms ! Then, immediately the part affected is felt to throb, a large bread and water poultice should be applied ; and as soon as

the abscess can be lanced, this ought to be done; and the patient must be careful that the opening made into it is kept *freely* open, that the matter may easily escape, until the abscess shall have healed. If the poultice, after a little time, should fret the skin, so as to produce an eruption, it may be exchanged for a piece of lint, placed over the opening of the abscess; and over the breast itself a piece of linen, spread with spermaceti ointment. This eruption should give no uneasiness to the mind of the female; (which it frequently does;) it is of no consequence, and will soon disappear after the poultices are discontinued.

Is the child to be suckled from the breast affected?

—If the matter from the abscess is not mixed with milk, and the abscess is small, it may do so with advantage to the breast, and no detriment to itself; but if much of the bosom be involved in the disease, the child should be put to the other breast only.

If the milk has left the breast, is it likely to return? — In some instances it soon returns, and the female may then nurse the infant from it, as well as from the other breast; more frequently, however, it does not, and then the child must be brought up on one breast alone.

Will the hardness which remains in the breast after the abscess has healed be removed? — Yes, in time; and the mother need not give herself any uneasiness upon this point. I know that this circum-

stance gives rise frequently to the most painful and gloomy apprehension ; cancer is supposed likely to ensue. Never fear : the hardness will remain for a long time ; but only because a long time is required for its absorption, which may be promoted by the part being gently rubbed twice a day with the soap liniment. To conclude, fail not to give your medical adviser an early opportunity to attack the disease, and follow his directions strictly.

SECT. VI.—THE PLAN OF SUCKLING.

From the first moment the infant is applied to the breast, it must be nursed upon a certain plan. This is necessary for the well doing of the child, and will contribute essentially to preserve the health of the parent, to keep her a good nurse, and render her duty a pleasure and delight.

Until the br̄east-milk is fully established—which may not be accomplished until the second or third day subsequent to delivery—the infant must be fed every four hours upon a little gruel, or upon one third of gruel, and two thirds of milk sweetened with sugar. After this time, it must obtain its nourishment from the breast alone, at regular intervals of four or five hours day and night, as this allows sufficient time for each meal to be digested, and tends to keep the bowels of the child in order. Such regularity, moreover, will do

much to obviate fretfulness, and that constant cry, which it seems as if nothing but for ever putting the child to the breast would allay. For the same reason the child that sleeps with its parent must not be allowed to have the nipple remaining in its mouth all night, and if nursed as recommended, will be found to awaken, as the hour for its mea approaches, with great regularity.

This plan, and without variation, must be pursued to the sixth or seventh month, when the child may be fed twice in the course of the day. Arrow-root, barley, Irish moss, with the addition of fresh milk and a little white sugar being the best food: and as the teeth gradually make their appearance, beef tea and chicken broth may be given occasionally till weaning.

SECT. VII.—DEFICIENCY OF MILK.

It is the custom with many two or three weeks after their confinement, if the supply of nourishment for the infant is scanty, to partake largely of malt-liquor for its increase. Sooner or later this will be found injurious to the constitution of the mother. But how then is the deficiency to be obviated? Let the nurse keep but in good health, and this point gained, the milk, both as to quantity and quality, will be as ample and good as can be produced by the individual.

I would recommend a plain, generous and nutritious diet—not one description of food exclusively, but as is natural, a wholesome mixed animal and vegetable diet, with or without wine, according to former habit. Regular exercise after leaving the lying-in-room, and the use of the cold salt-water shower-bath every morning; if the latter cannot be borne, sponging the head and chest as a substitute.

A pint of good sound ale may be taken daily and with advantage, if it agree with the stomach.

In this case, however, where there has been any early deficiency in the supply of nourishment, it will most frequently happen that long before the sixth or seventh month the infant's demands will be greater than the mother can meet. The deficiency must be made up by artificial food, which must be of the kind generally employed before the sixth month, and given through the bottle. If, however, this plan of dieting should disagree, the child must have another nurse.

SECT. VIII.—THE CHOICE OF A WET-NURSE.

Ill health and many other circumstances may prevent a parent from suckling her child, and render a wet-nurse necessary. Now although she will do wisely to leave the choice of one to her medical attendant, still as some difficulty may

attend this, and as most certainly the principal points to which his attention is directed in the selection of a good nurse the mother herself ought to be acquainted with, it will be well to point out in what they consist.

The first thing then to which a medical man looks, is the general health of the woman—next, the condition of her breast—the quality of her milk—its age, and her own—whether she is ever unwell while nursing—and, last of all, the condition and health of the child.

Is the woman in good health? Her general appearance ought to betoken a sound constitution—her tongue clean, and digestion good—her teeth and gums sound and perfect—her skin free from eruption, and her breath sweet.

What is the condition of the breast? A good breast should be firm and well formed—its size not dependant upon a large quantity of fat, which will generally take away from its firmness, giving it a flabby appearance, but upon its glandular structure, which conveys to the touch a knotted, irregular, and hard feel—and the nipple must be perfect, of moderate size, but well developed.

What is the quality of the milk? It should be thin, and of a bluish-white colour; sweet to the taste; and when allowed to stand, should throw up a considerable quantity of cream.

What is its age? If the lying-in-month of the patient has scarcely expired, the wet-nurse hired

ought certainly not to have reached her second month. At this time the nearer the birth of the child, and the delivery of its foster-parent, the better.

The nurse should not be too old. A vigorous young woman from twenty-one to thirty, admits of no question. And the woman who has had one or two children before is always to be preferred, as she will be likely to have more milk, and may also be supposed to have acquired some experience in the management of infants.

Inquire of her *whether she is ever unwell while nursing*. If so, reject her at once. You will have no difficulty in ascertaining this point, for this class of persons have an idea that their milk is *renewed*, as they term it, by this circumstance, monthly; and, therefore, that it is a recommendation, rendering their milk fitter for younger children than it would otherwise have been.—It produces, however, quite a contrary effect: it much impairs the milk, which will be found to disagree with the child, rendering it at first fretful—after a time being vomited up, and productive of frequent watery dark green motions.

Last of all, *what is the condition of the child?* It ought to have the sprightly appearance of health—to bear the marks of being well nourished—its flesh firm—its skin clean and free from eruption. It should be examined in this respect

particularly about the head and neck, as also its gums.

If a medical man finds that both mother and child answer to the above description, he has no hesitation in recommending the former as likely to prove a good wet-nurse.

The principal points which the parent must investigate for herself (independent of the medical attendant's inquiries) have reference to *the moral qualifications* of the applicant ; and if there is found to be any defect here, however healthy or otherwise desirable, the woman ought at once to be rejected. *Temperance*, cleanliness, a character for good conduct, fondness for children, and aptness in their management, are among the most important requisites. An amiable disposition and cheerful temper are also very desirable. A violent fit of passion may exert a most pernicious influence on the breast-milk, and so alter its healthy qualities that a child has been frequently known to be attacked with a fit of convulsions after being suckled by a nurse while laboring under the effects of a fit of anger ; the depressing passions as frequently drive the milk away altogether. It is hence of no small moment that a wet-nurse be of a quiet and even temper, and not disposed to mental disturbance. The following instance, in confirmation of the latter statement, fell under my notice very lately. On the afternoon of Christmas-day last, a gentleman called for me in great haste and distress of mind,

having left his child (an infant between two and three months) in an attack of convulsions, so severe as to threaten a fatal termination. This child I had seen at the same hour the day before sucking at the breast of its wet-nurse in perfect health, never having had a moment's illness. It appeared that the little patient had shown the first symptoms of indisposition the previous night after the nurse had retired to rest ; when having been at the breast, it became restless, crying frequently, evidently from pain. In the course of the night the bowels were violently purged ; toward morning the stomach would not retain the milk ; and as the day advanced the general symptoms of uneasiness increased, and in the afternoon the convulsions above referred to came on.

Upon inquiry I found that the father of the young nurse had called on the previous evening ; and not only violently abused his daughter, using severe and unwarrantable language, but had struck the poor girl, he being under the influence of liquor at the time. This interview produced such mental distress in the young woman as to attract the attention of her mistress, when an explanation of the cause ensued. Strict orders were given to forbid the man the house in future : but the mischief was done ; for it was but too evident that the alarming state in which I found the child had been produced by the deleterious change which had taken place in the nurse's milk. Remedial measures were used

the breast-milk withheld ; and the infant, although it continued for many days in a doubtful state, eventually recovered : the young woman's milk, however, was altogether driven away, and another wet-nurse was, without delay, obliged to be obtained.

It is unnecessary to aliude to other qualities which a woman who is sought as a wet-nurse should possess : they will naturally suggest themselves to any thoughtful mind.

SECT. IX.—DIET AND REGIMENT OF A WET-NURSE

The regimen of a wet-nurse should not differ much from that to which she has been accustomed : and any change which it may be necessary to make in it should be gradual. It is erroneous to suppose that women, when nursing, require to be much more highly fed than at other times : a good nurse does not need this, and a bad one will not be the better for it. The quantity which many nurses eat and drink, and the indolent life which they too often lead, derange their digestive organs, and frequently induce a state of febrile excitement, which always diminishes, and even sometimes altogether disperses the milk.

It will be necessary, then, to guard against the nurse overloading her stomach with a mass of indigestible food and drink. She should live as much as possible in the manner to which she has been

accustomed ; she should have a wholesome mixed animal and vegetable diet, and a moderate and somewhat extra quantity of malt liquor, provided it agree with her system.

A very prevailing notion exists that porter tends to produce a great flow of milk, and in consequence the wet-nurse is allowed as much as she likes : a large quantity is in this way taken, and after a short time so much febrile action excited in the system, that the flow of milk is greatly diminished. Some parents, however, aware of this fact, will go into an opposite extreme, and refuse the nurse even that which is necessary. Either excess is of course wrong. It is difficult to say what ought to be considered a proper daily allowance, but some is generally necessary ; and whenever a woman has been used to drink malt liquor, she will rarely make a good wet-nurse if she is denied a reasonable quantity of that beverage. Good sound ale sometimes agrees better than porter.

It may be well here to remark, that in London I frequently meet with severe cases of diarrhoea in infants at the breast, fairly traceable to bad porter, which vitiating the quality of the milk, no medical treatment cures the disease, until this beverage is left off or changed, when it at once disappears. The following is a case in point. On the 25th May, 1836, I was called to see an infant at the breast with diarrhoea. The remedial measures had but little effect so long as the infant was allowed the breast.

milk ; but this being discontinued, and arrow-root made with water only allowed, the complaint was quickly put a stop to. Believing that the mother's milk was impaired from some accidental cause which might now be past, the infant was again allowed the breast ; in less than four-and-twenty hours, however, the diarrhoea returned. The mother being a very healthy woman, it was suspected that some unwholesome article in her diet might be the cause ; the regimen was accordingly carefully inquired into, when it appeared that porter from a neighboring publican's had been substituted for their own for some little time past. This proved to be bad, throwing down, when left to stand a few hours, a considerable sediment : it was discontinued ; good sound ale taken instead ; the infant again put to the breast — upon the milk of which it flourished, and never had another attack.

Again, the nurse should take exercise daily in the open air. Nothing tends more directly to maintain a good supply of healthy milk than air and exercise ; and the best wet nurse would soon lose her milk, if constantly kept within doors. Sponging the whole body also with cold water with bay salt in it every morning, should be insisted upon, if possible: it preserves cleanliness, and greatly invigorates the health. United with this, the nurse should rise early, and also be regularly employed during the day in some little portion of duty in the family, an attendance on the wants of the child not being alone sufficient.

**SECT. X.—THE INJURIOUS EFFECTS TO THE MOTHER OF
UNDUE AND PROTRACTED SUCKLING.**

The period of suckling is generally one of the most healthy of a woman's life. But there are exceptions to this; and nursing, instead of being accompanied by health, may be the cause of its being materially, and even fatally, impaired. This may arise from one of two causes: either a parent continuing to suckle too long,—or, from the original powers or strength not being equal to the continued drain on the system.

Examples of the first-class I am meeting with daily. I refer to poor married women, who, having nursed their infants eighteen months, two years, or even longer than this, from the belief that by so doing they will prevent pregnancy, call to consult me with an exhausted frame and disordered general health, arising solely from protracted nursing, pursued from the above mistaken notion.

Of the second class, I most frequently meet with it in the delicate woman, who, having had two or three children in quick succession, her health gives way, so that she has all the symptoms arising from undue suckling, when perhaps the infant at her breast is not more than two or three months old.

Since the health of the mother, then, will suffer materially from this circumstance, she ought not to be in ignorance of the fact; so that, when the

first symptoms manifest themselves, she may be able to recognise their *insidious* approach ; and, tracing them to their real cause, obtain medical advice before her health be seriously impaired.

Symptoms. — The earliest symptom is a dragging sensation in the back when the child is in the act of sucking, and an exhausted feeling of sinking and emptiness at the pit of the stomach afterward. This is soon followed by loss of appetite, costive bowels, and pain in the left side. Then, the head will be more or less affected ; sometimes with much throbbing, singing in the ears, and always some degree of giddiness, with great depression of spirits.

Soon the chest becomes affected ; and the breathing is short, accompanied by a dry cough and palpitation of the heart, upon the slightest exertion. As the disease advances, the countenance becomes very pale, and the flesh wastes ; and profuse night perspirations, great debility, swelling of the ankles, and nervousness ensue. It is unnecessary, however, to enter into a more full detail of symptoms.

Treatment. — All that it will be useful to say in reference to treatment is this, that although much may be done in the first instance by medicine, change of air, cold and sea bathing, yet the quickest and most effectual remedy is to *wean the child*, and thus remove the cause.

There is another and equally powerful reason **why** the child should be weaned, or rather have a

young and healthy wet-nurse, if practicable. *The effects upon the infant*, suckled under such circumstances, will be most serious. Born in perfect health, and having continued so up to this period, it will now begin to fall off in its appearance; for the mother's milk will be no longer competent to afford it due nourishment,—it will be inadequate in quantity and quality. Its countenance, therefore, will become pale; its look sickly; the flesh soft and flabby; the limbs emaciated; the stomach large; and the evacuations fetid and unnatural. And, in a very few weeks, the blooming healthy child will be changed into the pale, sickly, peevish, wasted creature, whose life appears hardly desirable.

The only measure that can save the life, and recover an infant from this state, is that which would previously have prevented it—a healthy wet-nurse.

If the effects upon the infant should not be so aggravated as those just described, and it subsequently live and thrive, there will be a tendency in such a constitution to scrofula and consumption, to manifest itself at some future period of life, undoubtedly acquired from the parent, and dependant upon the impaired state of her health at the time of its suckling. A wet-nurse, early resorted to, will prevent this.

It will be naturally asked, for how long a period a mother ought to perform the office of a nurse?

No specific time can be mentioned ; and the only way in which the question can be met is this,—no woman, with advantage to her own health, can suckle her infant beyond twelve or eighteen months ; and at various periods between the third and twelfth month, many women will be obliged partially or entirely to resign the office.

The *monthly periods* generally reappear from the twelfth to the fourteenth month from delivery ; and when established, as the milk is found invariably to diminish in quantity, and also to deteriorate in quality, and the child is but imperfectly nourished, it is positively necessary in such instances at once to wean it.

SECT. XI.—MOTHERS WHO OUGHT NEVER TO SUCKLE.

There are some females who ought never to undertake the office of suckling, not so much on account of their own health, as that of their offspring.

The woman of a consumptive and strumous constitution ought not.—In the infant born of such a parent there will be a constitutional predisposition to the same disease ; and if it is nourished from her system, this hereditary predisposition will be confirmed.

“No fact in medicine is better established than that which proves the hereditary transmission from parents to children of constitutional liability

to pulmonary disease, and especially to consumption ; yet no condition is less attended to in forming matrimonial engagements. The children of scrofulous or consumptive parents are generally precocious ; and their minds being early matured, they engage early in the business of life, and often enter the married state before their bodily frame has had time to consolidate. For a few years every thing seems to go on prosperously, and a numerous family gathers around them. All at once, however, even while youth remains, their physical powers begin to give way ; and they drop prematurely into the grave, exhausted by consumption, and leaving children behind them, destined, in all probability, either to be cut off as they approach maturity, or to run through the same delusive but fatal career as that of the parents from whom they derived their existence.* There is scarcely an individual who reads these facts to whom memory will not furnish some sad and mournful example of their truth, though they perhaps may have hitherto been in ignorance of the exciting cause.

The constitution, then, of such a female renders her unfit for this task ; and however painful it may be to her mind at every confinement to debar herself this delightful duty, she must recollect that it will be far better for her own health, and infinitely

* Combe's Principles of Physiology applied to the Preservation of Health, &c.

more so for that of the child, that she should not even attempt it; that her own health would be injured, and her infant's, sooner or later, destroyed by it.

The infant of a consumptive parent, however, must not be brought up by hand. It must have a young, healthy, and vigorous wet-nurse; and in selecting a woman for this important duty very great care must be observed. The child should be nursed until it is twelve or fifteen months old. In some cases it will be right to continue it until the first set of teeth have appeared, when it will be desirable that a fresh wet-nurse should be obtained for the last six months.* If the child is partially fed during the latter months (from necessity or any other cause), the food should be of the lightest quality, and constitute but a small proportion of its nutriment.

But not only must the nourishment of such a child be regarded, but the *air* it breathes, and the *exercise* that is given to it; as also the careful removal of all functional derangements as they occur, by a timely application to the medical attendant, and maintaining, especially, a healthy condition of the digestive organs. All these points must be strictly followed out, if any good is to be effected.

By a rigid attention to these measures the mother adopts the surest antidote, indirectly, to overcome the constitutional predisposition to that dis-

* One that has been confined about six weeks or two months.

ease, the seeds of which, if not inherited from the parent, are but too frequently developed in the infant during the period of nursing ; and, at the same time, she takes the best means to engender a sound and healthy constitution in her child. This, surely, is worth any sacrifice.

If the infant derives the disposition to a strumous constitution entirely from the father, and the mother's health be unexceptionable, then I would strongly advise her to suckle her own child.

The mother of a highly susceptible nervous temperament ought not.—There are other women who ought never to become nurses. The mother of a highly susceptible nervous temperament, who is alarmed at any accidental change she may happen to notice in her infant's countenance, who is excited and agitated by the ordinary occurrences of the day,—such a parent will do her offspring more harm than good by attempting to suckle it. Her milk will be totally unfit for its nourishment : at one time it will be deficient in quantity,—at another so depraved in its quality, that serious disturbance to the infant's health will ensue.

The young and inexperienced mother, who is a parent for the first time, and altogether ignorant of the duties of her office, and at the same time most anxious to fulfil them faithfully, is but too frequently an instance in point ; although at a future period

she will generally make a good nurse. The following is an illustration :—

In December, 1838, I attended a young married lady in her first confinement, and in excellent health. She gave birth to a fine, plump, healthy boy. Every thing went on well for three weeks, the mother having an abundant supply of milk, and the infant evidently thriving upon it. About this time, however, the child had frequent fits of crying ; the bowels became obstinately costive ; the motions being lumpy, of a mixed colour, quite dry, and passed with great pain. It became rapidly thin ; and after a while its flesh so wasted, and became so flabby, that it might be said literally to hang on the bones. The fits of crying now increased in frequency and violence, coming on every time after the little one left the breast, when it would commence screaming violently, beat the air with its hands and feet, and nothing that was done could appease it. Having lasted for half an hour or more, it would then fall asleep quite exhausted ; the fit recurring again and again after every nursing.

It was very evident that the infant's hunger was not satisfied ; as it was also but too evident its body was not nourished by the parent's milk, which, although abundant in quantity (the breast being large and full of milk), was at this time seriously deteriorated in its nutritive quality. This was caused, I believe, from great anxiety of mind. Her monthly nurse became suddenly deranged, and the whole

responsibility and care of the child thus devolved upon the mother, of the duties connected with which she was entirely ignorant.

A wet-nurse was obtained. In a very few hours after this change was effected the screaming ceased, the child had quiet and refreshing sleep, and in twelve hours a healthy motion was passed. The child gained flesh almost as quickly as it had previously lost it, and is now as fine and healthy an infant as it promised to be when born.

Whenever there has existed previously any nervous or mental affection in the parent, wet-nurse suckling is always advisable ; this, with judicious management of childhood, will do much to counteract the hereditary predisposition.

The mother who only nurses her infant when it suits her convenience ought not.—The mother who cannot make up her mind exclusively to devote herself to the duties of a nurse, and give up all engagements that would interfere with her health, and so with the formation of healthy milk, and with the regular and stated periods of nursing her infant, ought never to suckle. It is unnecessary to say why ; but I think it right for the child's sake to add, that if it does not sicken, pine, and die, *disease will be generated in its constitution*, to manifest itself at some future period.

The child, then, under all the foregoing circumstances, must be provided with its support from another source, and a wet-nurse is the best.

SECT. XII.—WEANING.

The time when to take place.—The time when weaning is to take place must ever depend upon a variety of circumstances, which will regulate this matter, independently of any general rule that might be laid down. The mother's health may, in one case, oblige her to resort to weaning before the sixth month; and in another instance, the delicacy of the infant's health to delay it beyond the twelfth. Nevertheless, as a *general rule*, both child and parent being in good health, weaning ought never to take place earlier than the ninth (the most usual date), and never delayed beyond the twelfth month.

I should say further, that if child and parent are both in vigorous health—if the infant has cut several of its teeth, and been already accustomed to be partially fed, weaning ought to be gradually accomplished at the ninth month. On the other hand, that if the child is feeble in constitution, the teeth late in appearing, and the mother is healthy, and has a sufficient supply of good milk, especially if it be the winter season, it will be far better to prolong the nursing for a few months. In such a case, the fact of the non-appearance of the teeth indicates an unfitness of the system for any other than the natural food from the maternal breast.

And again, if the infant is born of a consumptive parent, and a healthy and vigorous wet-nurse has been provided, weaning should most certainly be deferred beyond the usual time, even beyond eighteen months; carefully watching, however, that neither nurse nor child suffer from its continuance.

The mode.—It should be effected gradually. From the sixth month most children are fed twice or oftener in the four-and-twenty hours; the infant is in fact, therefore, from this time, in the progress of weaning; that is to say, its natural diet is partly changed for an artificial one, so that when the time for *complete weaning* arrives, it will be easily accomplished, without suffering to the mother, or much denial to the child.

It is, however, of the greatest importance to regulate the quantity and quality of the food at this time. If too much food is given (and this is the great danger), the stomach will be overloaded; the digestive powers destroyed; and, if the child is not carried off suddenly by convulsions, its bowels will become obstinately disordered; it will fall away from not being nourished, and perhaps eventually become a sacrifice to the over-anxious desire of the parent and its friends to promote its welfare.

The kind of food proper for this period, and the mode of administering it, are detailed in the next section, on “Artificial Feeding.”

Much exercise in the open air (whenever there is no dampness of atmosphere) is highly necessary and beneficial at this time; it tends to invigorate the system, and strengthens the digestive organs, and thus enables the latter to bear without injury the alteration in diet.

The dispersing the mother's milk. — From the circumstance of the child being partially fed for some time before it is completely weaned, the mother will experience little trouble in dispersing her milk. She must, however, not neglect to take opening medicine, not only to assist the foregoing object, but also to prevent that depression of spirits, lassitude, loss of appetite, and general derangement of health, which so frequently follow weaning, when these medicines are omitted.

If the breasts should continue loaded, or indeed painfully distended, the aperient must not only be taken so frequently as to keep the bowels gently relaxed, but the diet must be diminished in quantity, and solid nourishment only taken. The breasts too, if painfully distended, must be occasionally drawn, but only just sufficiently to relieve the distension; they must also be rubbed for five or ten minutes, every four or five hours, with the following liniment previously warmed: compound soap liniment, one ounce and a half; laudanum, three drachms.

SECT. XIII.—ARTIFICIAL FEEDING.

Extreme delicacy of constitution, diseased condition of the frame, defective secretion of milk, and other causes, may forbid the mother suckling her child; and unless she can perform this office with safety to herself and benefit to her infant, she ought not to attempt it. In this case a young and healthy wet-nurse is the best substitute; but even this resource is not always attainable. Under these circumstances the child must be brought up on an artificial diet—"by hand," as it is popularly called.

To accomplish this with success requires the most careful attention on the part of the parent, and at all times is attended with risk to the life of the child; for although some children thus reared live and are strong, these are exceptions to the general rule, artificial feeding being in most instances unsuccessful.

The kind of artificial food before the sixth month.
—It should be as like the breast milk as possible. This is obtained by a mixture of cow's milk, water, and loaf sugar, in the following proportions: fresh cow's milk, two-thirds; water, or thin barley-water, one-third; loaf sugar, a sufficient quantity to sweeten. This is the best diet that can be used for the first six months; after which some farinaceous food may be combined.

In early infancy mothers are too much in the habit of giving thick gruel, panada, biscuit, food, and such matters, thinking that a diet of a lighter and thinner kind will not nourish. This is a mistake, for these preparations are much too solid ; they overload the stomach, and cause indigestion, flatulence, and griping. These create a necessity for purgative medicines and carminatives, which again weaken digestion, and by unnatural irritation, perpetuate the evils which render them necessary. Thus many infants are kept in a continual round of repletion, indigestion, and purging, with the administration of cordials and narcotics, who, if their diet were in quantity and quality suited to their digestive powers, would need no aid from physic or physicians.

In preparing this diet, it is highly important to obtain pure milk, not previously skimmed, or mixed with water ; and in warm weather just taken from the cow. It should not be mixed with the water and sugar until wanted, and no more made than will be taken by the child at the time, for it must be prepared fresh at every meal. It is best not to heat the milk over the fire, but let the water be in a boiling state when mixed with it, and thus given to the infant tepid or lukewarm.

As the infant advances in age, the proportion of milk may be gradually increased ; this is necessary after the second month. But there must be no change in the kind of diet if the health of the child

is good, and its appearance perceptibly improving. Nothing is more absurd than the notion that in early life children require a variety of food ; only one kind of food is prepared by nature, and it is impossible to transgress this law without marked injury.

If cow's milk disagree with an infant — and this is sometimes unfortunately the case, even from its birth — ass's milk, diluted with one-third its quantity of water, may be given as a substitute.

Sometimes the mother's breast and every description of milk is rejected by the child ; in which case recourse must be had to veal or weak mutton broth, or beef tea, clear and free from fat, mixed with a very small quantity of farinaceous food, carefully passed through a sieve before it is poured into the sucking-bottle.

The mode of administering it. — There are two ways — by the spoon and by the nursing-bottle. The first of these ought never to be employed at this period, inasmuch as the power of digestion in infants is very weak, and their food is designed by nature to be taken very slowly into the stomach, being procured from the breast by the act of sucking ; in which act a great quantity of saliva is secreted, and, being poured into the mouth, mixes with the milk, and is swallowed with it. This process of nature, then, should be emulated as far as possible ; and food (for this purpose) should be imbibed by

suction from a nursing-bottle : it is thus obtained slowly, and the suction employed secures the mixture of a due quantity of saliva, which has a highly important influence on digestion.

Too much care cannot be taken to keep the bottle perfectly sweet. For this purpose there should always be two in the nursery, to be used alternately ; and, if any food remain after a meal, it must be emptied out. The bottle always to be scalded out after use. The flat glass nursing-bottle itself is too well known to need description : it may be well, however, to say a word about the teat that covers its narrow neck, and through which the infant sucks the food.

If the artificial or prepared cow's teat is made use of, it should be so attached to the bottle that its extremity does not extend beyond its apex more than half or three quarters of an inch ; for if it projects more than this, the child will get the sides of the teat so firmly pressed together between its gums, that there will be no channel for the milk to flow through. Many mothers prefer using soft wash-leather instead of the teat,* which is firmly attached to the end of the bottle by thread, and a small opening made at the extremity for the milk to pass through. This is a good substitute ; but a fresh piece of leather must be made use of daily,

* Both teat and wash-leather should have placed in them a small conical piece of sponge, to prevent the possibility of too rapid a flow of the milk.

otherwise the food will be tainted, and the child's bowels deranged.

The most cleanly and convenient apparatus is a cork nipple, upon the plan of M. Darbo, of Paris, fixed in the sucking-bottle. The cork, being of a particularly fine texture, is supple and elastic, yielding to the infant's lips while sucking, and is much more durable than the teats ordinarily used.

Whatever kind of bottle or teat is used, however, it must never be forgotten that cleanliness is absolutely essential to the success of this plan of rearing children.

The quantity of food to be given at each meal.— This must be regulated by the age of the child and its digestive power. A little experience will soon enable a careful and observing mother to determine this point. As the child grows older, the quantity of course must be increased.

The chief error in rearing the young is overfeeding, and a most serious one it is; but which may be easily avoided by the parent pursuing a systematic plan with regard to the hours of feeding, and then only yielding to the indications of appetite, and administering the food slowly, in small quantities at a time. This is the only way effectually to prevent indigestion and bowel complaints, and the irritable condition of the nervous system, so common in infancy, and secure to the infant healthy nutrition, and consequent strength of constitution

As has been well observed, “Nature never intended the infant’s stomach to be converted into a receptacle for laxatives, carminatives, antacids, stimulants, and astringents; and when these become necessary, we may rest assured that there is something faulty in our management, however perfect it may seem to ourselves.”

The frequency of giving food.—This must be determined, as a general rule, by allowing such an interval between each meal as will ensure the digestion of the previous quantity, and this may be fixed at about every three or four hours. If this rule is departed from, and the child receive a fresh supply of food every hour or so, time will not be given for the digestion of the previous quantity; and, as a consequence of this process being interrupted, the food passing on into the bowel undigested, will there ferment and become sour; will inevitably produce colic and purging, and in no way contribute to the nourishment of the child.

The posture of the child when fed.—It is important to attend to this. It must not receive its meals lying; the head should be raised on the nurse’s arm—the most natural position, and one in which there will be no danger of the food going the wrong way, as it is called. After each meal the little one should be put in its cot, or repose on its mother’s knee, for at least half an hour. This is essential

for the process of digestion, as exercise is important at other times for the promotion of health.

The kind of artificial food suitable after the sixth month.—As soon as the child has got any teeth,—and about this period one or two will make their appearance,—solid farinaceous matter boiled in water, beaten through a sieve, and mixed with a small quantity of milk, may be employed. Or tops and bottoms, steeped in hot water, with the addition of fresh milk and loaf sugar to sweeten. And the child may now, for the first time, be fed with a spoon.

When one or two of the large grinding teeth have appeared, the same food may be continued, but need not be passed through a sieve. Beef tea and chicken broth may occasionally be added ; and, as an introduction to the use of a more completely animal diet, a portion, now and then, of a soft-boiled egg ; by and by a small bread pudding, made with one egg in it, may be taken as the dinner meal.

Solid animal food must not be given until the whole of the first set of teeth are complete. It should be plainly roasted or boiled, and may be given hot or cold ; but food warmed up again should never be allowed to a child. It should be of the lightest quality, small in quantity, and given on alternate days only ; and even then its effects must be watched, for all changes in the regimen of chil

dren should be gradual. It is erroneous to suppose that the more animal food a delicate and weakly child takes, the more it is strengthened : it only adds to its debility ; and it will be found that those children who have but a moderate proportion of animal food enjoy the greatest proportion of health and strength.

A great error exists in the minds of some parents upon this subject. They give their children animal food too early, and in too great a quantity. The system, as a consequence, becomes excited, nutrition is impeded, and disease produced, ultimately manifesting itself in scrofula, disease in the abdomen, head, or chest : the first seeds of consumption are frequently laid in this way. A child so indulged will eat heartily enough ; but he remains thin notwithstanding, has frequent fever, and a deranged condition of the bowels. In such a child, too, it will be found that the ordinary diseases of infancy—scarlet fever, measles, &c.—will be attended with an unusual degree of constitutional disturbance ; that it will not bear such active treatment, or so quickly rally from the illness.

As the child advances in age *the best beverage is water*. The practice of giving wine, or any stimulant to a healthy child, is highly reprehensible ; it ought never to be given but medicinally. In infancy and childhood the circulation is rapid and easily excited ; and the nervous system is strongly acted upon, even by the slightest external impres-

sions. Hence slight causes of irritation readily excite febrile and convulsive disorders. The object of the parent, therefore, is not to stimulate, but rather to abate nervous and vascular action : wine, accordingly, is detrimental to children. Children who require it as a medicine are, of course, exceptions to the foregoing general rule.

The kind of diet most suitable under the different complaints to which infants are liable. — Artificial food, from mismanagement and other causes, will now and then disagree with the infant. The stomach and bowels are thus deranged, and medicine is resorted to ; and again and again the same thing occurs.

This is wrong, and but too frequently productive of serious and lasting mischief. *Alteration of diet*, rather than the exhibition of medicine, should, under these circumstances, be relied on for remedying the evil. Calomel, and such like remedies, "the little powders of the nursery," ought not to be given on every trivial occasion. More mischief has been effected, and more positive disease produced, by the indiscriminate use of the above powerful drug, either alone or in combination with other drastic purgatives, than would be credited. Purgative medicines ought at all times to be exhibited with caution to an infant ; for so delicate and susceptible is the structure of its alimentary canal, that disease is but too frequently caused by that which was resorted to in the first instance as a remedy. The bowels should always be kept free.

but then it must be by the mildest and least irritating means.

It is a desirable thing, then, to correct the disordered conditions of the digestive organs of an infant, if possible, without medicine; and much may be done by changing the nature, and sometimes by simply diminishing the quantity, of food.

A diarrhœa, or looseness of the bowels, may frequently be checked by giving, as the diet, sago thoroughly boiled in very weak beef tea, with the addition of a little milk. The same purpose is frequently to be answered by two thirds of arrow-root with one third of milk, or simply thin arrow-root made with water only; or, if these fail, baked flour, mixed with boiled milk.

Costiveness of the bowels may frequently be removed by changing the food to tops and bottoms steeped in hot water, and a small quantity of milk added; or prepared barley, mixed in warm water and unboiled milk.

Flatulence and griping generally arise from an undue quantity of food, which passing undigested into the bowels, they are thus irritated and disturbed. This may be cured by abstinence alone. The same state of things may be caused by the food not being prepared fresh at every meal, or even from the nursing-bottle or vessel in which the food is given not having been perfectly clean. In this case weak chicken broth, or beef tea freed from fat, and thickened with soft-boiled rice or arrow-root, may be given.

CHAPTER VII.

HINTS FOR THE MANAGEMENT OF HEALTH DURING INFANCY.

SECT. I.—SLEEP.

FOR three or four weeks after birth the infant sleeps, more or less, day and night, only waking to satisfy the demands of hunger; at the expiration of this time, however, each interval of wakefulness grows longer, so that it sleeps less frequently, but for longer periods at a time.

This disposition to repose in the early weeks of the infant's life must not be interfered with; but this period having expired, great care is necessary to induce regularity in its hours of sleep, otherwise too much will be taken in the day-time, and restless and disturbed nights will follow. The child should be brought into the habit of sleeping in the middle of the day, before its dinner, and for about two hours, more or less. If put to rest at a later period of the day, it will invariably cause a bad night.

At first the infant should sleep with its parent. The low temperature of its body, and its small power of generating heat, render this necessary. If it should happen, however, that the child has disturbed and restless nights, it must be immediately removed to the bed and care of another female, to be brought to its mother at an early hour in the morning for the purpose of being nursed. This is necessary for the preservation of the mother's health, which through sleepless nights would of course be soon deranged, and the infant would also suffer from the influence which such deranged health will have upon the milk.

When a month or six weeks has elapsed, the child, if healthy, may sleep alone in a cradle or cot, care being taken that it has a sufficiency of clothing,—that the room in which it is placed is sufficiently warm, viz. 60° ,—and that the position of the cot itself is not such as to be exposed to currents of cold air. It is essentially necessary to attend to these points; since the faculty of producing heat, and consequently the power of maintaining the temperature, is less during sleep than at any other time, and therefore exposure to cold is especially injurious. It is but too frequently the case that inflammation of some internal organ will occur under such circumstances, without the true source of the disease ever being suspected. Here, however, a frequent error must be guarded against,—that of covering up the infant in its cot with too

much clothing,—throwing over its face the muslin handkerchief,—and, last of all, drawing the drapery of the bed closely together. The object is to keep the infant sufficiently warm with pure air; it therefore ought to have free access to its mouth, and the atmosphere of the whole room should be kept sufficiently warm to allow the child to breathe it freely: in winter, therefore, there must always be a fire in the nursery.

SECT. II.—BATHING AND CLEANLINESS.

Too much attention cannot be paid to cleanliness; it is essential to health.

Temperature of the water.—At first the infant should be washed daily with warm water, and a bath every night for the purpose of thoroughly cleaning the body is highly necessary. To bathe a delicate infant of a few days, or even weeks old, in cold water, with a view to “harden” the constitution (as it is called), is the most effectual way to undermine its health and entail future disease. By degrees, however, the water with which it is sponged in the morning should be made tepid, the evening bath being continued warm enough to be grateful to the feelings. A few months having passed by, the temperature of the water may be gradually lowered, until cold is employed, with which it may be either sponged, or even plunged

into it, every morning during summer. With some children, however, there is such extreme delicacy and deficient reaction, as to render this hazardous ; its effects, therefore, must be carefully watched.

Drying the skin.—The surface of the skin should always be carefully and thoroughly rubbed dry with flanne.. Indeed, more than dry ; for the skin should be warmed and stimulated by the assiduous gentle friction made use of. For this process of washing and drying must not be done languidly, but briskly and expeditiously ; and will then be found to be one of the most effectual means of strengthening the infant. It is especially necessary carefully to dry the armpits, groins, and nates ; and if the child is very fat, it will be well to dust over those parts with hair-powder or starch : this prevents excoriations and sores, which are frequently very troublesome. Soap is only required to those parts of the body which are exposed to the reception of dirt.

Napkins.—The frequency of the discharges from the bowels and bladder requires a frequent change of napkins. A nurse cannot be too careful of this duty from the first, so that she may be enabled to discover the periods when these discharges are about to take place, that she may not only anticipate them, but teach the child, at a very early age, to give intelligent warning of its necessities. Thus a habit of regularity with regard to these functions will be established, which will continue through life, and tend greatly to the promotion of

health. As the child grows older, the system of cleanliness must in no particular be relaxed ; and it will be found the best preservative against those eruptive disorders which are so frequent and troublesome during the period of childhood.

SECT. III. — CLOTHING.

Infants are very susceptible of the impressions of cold ; a proper regard, therefore, to a suitable clothing of the body is imperative to their enjoyment of health. Unfortunately, an opinion is prevalent in society that the tender child has naturally a great power of generating heat and resisting cold ; and from this popular error have arisen the most fatal results. This opinion has been much strengthened by the insidious manner in which cold operates on the frame, the injurious effects not being always manifest during or immediately after its application, so that but too frequently the fatal result is traced to a wrong source, or the infant sinks under the action of an unknown cause.

The power of generating heat in warm-blooded animals is at its minimum at birth, and increases successively to adult age ; young animals, instead of being warmer than adults, are generally a degree or two colder, and part with their heat more readily ; facts which cannot be too generally known. They show how absurd must be the folly of that

system of “hardening” the constitution, as it is called, which induces the parent to plunge the tender and delicate child into the cold bath at all seasons of the year, and freely expose it to the cold cutting currents of an easterly wind, with the lightest clothing.

The principles which ought to guide a parent in clothing her infant are as follows:—

The material and quantity of the clothes should be such as to preserve a sufficient proportion of warmth to the body; regulated, therefore, by the season of the year, and the delicacy or strength of the infant’s constitution. In effecting this, however, the parent must guard against the too common practice of enveloping the child in innumerable folds of warm clothing, and keeping it constantly confined to very hot and close rooms; thus running into the opposite extreme to that to which I have just alluded; for nothing tends so much to enfeeble the constitution, to induce disease, and render the skin highly susceptible of the impressions of cold, and thus produce those very ailments which it is the chief intention to guard against.

In their make they should be so arranged as to put no restrictions to the free movements of all parts of the child’s body; and so loose and easy as to permit the insensible perspiration to have a free exit, instead of being confined to and absorbed by the clothes, and held in contact with the skin till it gives rise to irritation.

In their quality they should be such as not to irritate the delicate skin of the child. In infancy, therefore, flannel is rather too rough; but is desirable as the child grows older, as it gives a gentle stimulus to the skin, and maintains health.

In its construction the dress should be so simple as to admit of being quickly put on; since dressing is irksome to the infant, causing it to cry, and exciting as much mental irritation as it is capable of feeling. Pins also should be wholly dispensed with, their use being hazardous through the carelessness of nurses, and even through the ordinary movements of the infant itself.

The clothing must be changed daily. It is eminently conducive to good health that a complete change of dress should be made every day. If this is not done, washing will, in a great measure, fail in its object, especially in ensuring freedom from skin diseases.

SECT. IV. — AIR AND EXERCISE.

The respiration of a pure air is at all times, and under all circumstances, indispensable to the health of the infant. The nursery, therefore, should be large, well ventilated, in an elevated part of the house, and so situated as to admit a free supply both of air and light. For the same reasons, the room in which the infant sleeps should be large

and the air frequently renewed ; for nothing is so prejudicial to its health as sleeping in an impure and heated atmosphere. The practice, therefore, of drawing thick curtains closely round the bed is highly pernicious ; they only answer a useful purpose when they defend the infant from any draught or current of cold air.

The proper time for taking the infant into the open air must, of course, be determined by the season of the year, and the state of the weather. Sir James Clark observes, that "a delicate infant, born late in the autumn, will not generally derive advantage from being carried into the open air, in this climate, till the succeeding spring ; and if the rooms in which he is kept are large, often changed, and well ventilated, he will not suffer from the confinement, while he will, most probably, escape catarrhal affections, which are so often the consequence of the injudicious exposure of infants to a cold and humid atmosphere." If, however, the child is strong and healthy, no opportunity should be lost of taking it into the open air at stated periods, experience daily proving that it has the most invigorating and vivifying influence upon the system. Regard, however, must always be had to the state of the weather ; and to a damp condition of the atmosphere the infant should never be exposed, as it is one of the most powerful exciting causes of consumptive disease. The nurse-maid, too, should not be allowed to loiter and linger about

thus exposing the infant unnecessarily, and for an undue length of time: this is generally the source of all the evils which accrue from taking the babe into the open air.

Exercise, also, like air, is essentially important to the health of the infant. Its first exercise, of course, will be in the nurse's arms. After a month or two, when it begins to sleep less during the day, it will delight to roll and kick about on the sofa: it will thus use its limbs freely; and, with the carrying out into the air, is all the exercise it requires at this period.

SECT. V. — APERIENT MEDICINE.

The only purgative medicines that can be given with safety to an infant, without medical sanction, are castor oil, manna, rhubarb, and magnesia.

1. CALOMEL

The mischievous effects of the indiscriminate use of calomel, medical men are daily called upon to witness. It is impossible for an unprofessional person to determine from the character of the alvine secretions whether calomel is necessary or not; and it cannot be too generally known that the effect of this medicine upon the evacuations is always to make them appear unnatural. From an ig-

norance of this fact, CALOMEL is often repeated again and again to relieve that very condition which it has itself produced, causing, but too frequently, a degree of irritation in the delicate lining membrane of the bowel, which it may be very difficult for a medical man to remove, and perhaps a source of misery to the child as long as it lives. Its frequent exhibition has also another evil attending it ; for, as Mr. Bell observes, in his work on the teeth, “the immoderate use of mercury in early infancy produces, more perhaps than any other similar cause, that universal tendency to decay, which, in many instances, destroys almost every tooth at an early age.” *As a domestic nursery medicine, therefore, calomel will be excluded by every prudent mother.*

It may be useful to mention, for the information of a young mother, that the bowels of an infant in health should be opened from two to four times in the twenty-four hours ; and that the motion should be fluid, of a lightish yellow colour, free from any fetid or acid smell, and destitute of lumps or white curdy matter ; and that it should be passed without pain, or any considerable quantity of wind.

A parent is only justified in giving aperient medicine when any deviation from these conditions exists, and only then when what may be called healthy costiveness is present — viz., either the stools less frequent than they ought to be, or lumpy and partially solid.

2. CASTOR OIL.

This is one of the mildest aperients, prompt in its action, and effective in clearing out the contents of the bowels ; it is a medicine, therefore, particularly applicable to infants.

During teething there is generally much torpor of the bowels ; here, then, castor oil is a very appropriate and useful artificial means of increasing the frequency of the alvine discharges.

The proper dose for an infant is from half a drachm to a drachm or two : it must be fresh cold-drawn castor oil, and may be blended with a little moist sugar ; or, if the stomach is unusually delicate, the oil may be made into an emulsion with some aromatic water, by the intervention of the yolk of an egg and a little sirup of roses combined with it. The following proportions make an elegant little mixture, of which a dessert spoonful may be repeated every hour until it operate :— Castor oil, six drachms ; the yolk of an egg ; sirup of roses, two drachms ; mix well, and add dill-water two ounces.

3. MANNA.

This also may be given with impunity to the youngest infant ; it is sweet to the taste, and mild in its operation. It should be exhibited in doses

of from one to two drachms in a little warm milk; or if it cause flatulence in this form in some aromatic water, as a dessert spoonful of caraway-seed or dill-water. For children above two years, it must always be given together with some other aperient.

4. MAGNESIA AND RHUBARB.

These medicines are most frequently given in the nursery combined, and are more effective when thus united than when given separately. The following form in a costive and flatulent state of the bowels will be found useful; a tea spoonful may be given every three or four hours until the desired effect is obtained:—Powdered rhubarb, half a drachm; magnesia, two scruples; compound spirit of ammonia, twenty drops; dill-water, two ounces; simple sirup, two drachms. When the infant throws up the nurse's *milk* it is generally *curdled*, a fact which leads the inexperienced mother to infer that the child is suffering from acidity; and to counteract the supposed evil, *magnesia* is given again and again. This is a useless and pernicious practice; for curdling or coagulation of the milk always takes place in the stomach, and is produced by the gastric juice; and is so far from being a morbid process, that milk cannot be properly digested without it.

5. THE LAVEMENT.

This is an excellent nursery remedy, when the bowels are obstinately costive. It may be ther employed as a substitute for medicine, a protracted and frequent use of which (even of the mildest aperients) is apt to injure the digestive functions, and to give rise to some degree of intestinal irritation.

The simplest form of an aperient enema is a quarter of a pint of warm water, or barley water, with a table spoonful of brown sugar; or, if it be desirable to increase its strength, a dessert spoon ful of castor oil may be added.

The mode of administering an injection deserves particular attention, as injury might be caused by its being performed in a careless or unskilful manner. A gum elastic pipe should be always used instead of the hard ivory tube. Having smeared this over with lard, and placed the infant on its left side with its knees bent up in the lap of the nurse, it is to be passed a couple of inches into the bowel, in a direction not parallel to the axis of the body, but rather inclined to the left. The latter circumstance should never be neglected; for if not attended to, there will be difficulty in administering the injection. The fluid must then be propelled very gradually, or it will be instantly rejected; on the whole being thrown up (the pipe carefully and

slowly withdrawn), the child must be kept quietly reposing on its nurse's lap, and in the same posture, for some little time.

6. THE APERIENT LINIMENT.

A liniment to be rubbed on the stomach is another resource in cases of habitual costiveness, and will frequently be attended with great success, when repeated purgatives have been resisted.

Olive or castor oil may be used for this purpose; they must be warmed and rubbed over the abdomen every day, for five or ten minutes. Perhaps the best form of liniment that can be made use of is the following: Compound soap liniment, one ounce; compound tincture of aloes, half an ounce

SECT. VI. — OPIATES.

This class of medicine is often kept in the nursery, in the forms of laudanum, sirup of white poppies, Dalby's carminative, and Godfrey's cordial.

The object with which they are generally given is to allay pain by producing sleep; they are, therefore, *remedies of great convenience to the nurse*; and I am sorry to add that, so exhibited, they are *but too often fatal to the little patient*.

In the hands of the physician, there is no medi-

cine the administration of which requires greater caution and judgment than opiates, both from the susceptibility of infants to their narcotic influence, and their varying capability of bearing it ; the danger, therefore, with which their use is fraught in the hands of a nurse, should for ever exclude them from the list of domestic nursery medicines.

Dalby's carminative and Godfrey's cordial are, perhaps, more frequently used than any other forms, and some striking cases, illustrative of the fatal results of exhibiting them indiscriminately, and without medical sanction, are on record. The late Dr. Clarke, in his Commentaries, mentions a case which he saw, where "*forty drops of Dalby's carminative destroyed an infant.*" Dr. Merriman gives the following in a note in Underwood on the diseases of Children :—

"A woman, living near Fitzroy-square, thinking her child not quite well, gave it a dose of Godfrey's cordial, which she purchased at a chymist's in the neighbourhood ; in a very short time after taking it, the child fell into convulsions, and soon died. In less than a month, the child of another woman in the same house was found to be ill with disordered bowels. The first woman, not at all suspecting that the Godfrey's cordial had produced the convulsions in her infant, persuaded her friend to give the same medicine to her child. A dose from the same bottle was given ; and this child was likewise attacked almost immediately with convulsions, and also died."

Convulsions and epilepsy, without such fatal re-

sults as the foregoing, are not uncommon as the effect of a single dose of an opiate given unadvisedly ; and by their continued and habitual use (and the form of sirup of poppies is but too often administered by an indiscreet and lazy nurse, unknown to the parent), a low, irritative, febrile state is produced, gradually followed by loss of flesh ; the countenance becoming pallid, sallow, and sunken ; the eyes red and swollen ; and the expression stupid and heavy, and the powers of the constitution at last becoming completely undermined. Such an object is to be seen daily among the poorer classes ; the miniature of a sickly aged person.

SECT. VII.— LEECHING.

Difficulty sometimes arises in putting a stop to the bleeding from leech-bites ; a matter of considerable importance in the case of a delicate infant. The following measures may be resorted to for this purpose :—

1. Expose the surface of the part to the external air, so that a coagulum of blood may form at the orifice : this simple mode will frequently arrest it

2. If this fail, make compression upon the part ; this is one of the most effectual means of restraining hemorrhage. It is to be effected by taking a piece of lint folded three or four thicknesses, and

the size of the finger-nail,—to be steadily pressed upon the open orifice with the point of the finger until the blood has ceased to flow. The pledget of lint, however, must not be removed for some hours afterward, or the bleeding will break out afresh.

3. If the compression fails in stopping the bleeding, or from the situation of the leech-bites it cannot be adopted because there is no firm point of resistance upon which to make pressure, the part may be dusted with starch or gum arabic powder; or, if this is of no avail, the wound may be touched with lunar caustic.

If none of these measures are successful, the assistance of the medical attendant must be obtained; and if firm pressure be made upon the part, no serious loss of blood can ensue before his arrival.

Leeches should never be resorted to by a parent for any of the diseases of infancy without medical direction.

SECT. VIII. — BLISTERS.

A blister should never be applied for any infantile disease, except when ordered by a medical man, as its injudicious use might greatly aggravate the complaint.

There are also *one or two precautions* in reference

to the *mode of the application* of a blister, which it is always right for a parent to attend to. From the great irritability of the skin, it should never be allowed to remain on longer than from two to four hours. At the expiration of this time the surface will usually become red and inflamed ; and, if the blister is removed, and the part dressed with fresh spermaceti ointment spread on lint, or with a soft bread and water poultice, a full blister will soon be raised. The little patient is thus saved much suffering, as well as a very troublesome sore prevented. A piece of tissue or silver paper, interposed between the blister and the skin, will answer the same purpose ; the blister will act well, and the evils before alluded to will be prevented.

After a blister has been two or three hours applied, its edge should be carefully raised, to ascertain the effect produced ; and if the surface be much inflamed, more particularly if little points of vesication are present, it should be removed, and the above directions adopted.

SECT. IX. — THE WARM BATH.

The warm bath is a very common nursery remedy, and its use but too frequently abused. Judiciously prescribed, it is one of the most valuable remedial agents we possess ; but although powerful for good, when misapplied it is equally powerful for mischief. For instance, in active inflamma-

tory affections, the use of the warm bath would greatly aggravate the disease; and yet, for an infant with active inflammation of the respiratory organs, it is continually resorted to.

The temperature of a warm bath for an infant not more than twelve months old should never exceed ninety-eight degrees Fahrenheit, and should not be below ninety; a thermometer should always be used, for a parent can never safely trust her own sensations.

The time which it may be proper for the infant to remain in the bath must depend upon circumstances; generally from ten to fifteen minutes will be the period prescribed.

Unless the bath is ordered for the feet only, the child's body ought to be immersed up to the shoulders or neck; otherwise that part of the body which is out of the bath (the shoulders, arms, and chest), exposed to the cooler temperature of the air, will be chilled.

When the infant is taken out of the bath, the general surface must be carefully rubbed dry, particularly the feet, and the warmth of the body kept up by immediately afterward putting the child into its cot.

SECT. X. — TEETHING.

Teething is a natural process. It is too frequently, however, rendered a painful and difficult one by errors in the management of the regimen

and health of the infant previous to the coming of the teeth, and during the process itself.

Thus, chiefly in consequence of injudicious management, it is made the most critical period of childhood. Not that I believe the extent of mortality fairly traceable to it is by any means so great as has been stated; for it is rated as high as one-sixth of all the children who undergo it. Still, no one doubts that first dentition is frequently a period of great danger to the infant. It therefore becomes a very important question to an anxious and affectionate mother, how the dangers and difficulties of teething can in any degree be diminished, or if possible altogether prevented. A few hints upon this subject may be useful.

The manner in which the first set of teeth appear.—The first set of teeth, or milk-teeth, as they are called, are twenty in number; they usually appear in pairs, and those of the lower jaw generally precede the corresponding ones of the upper. The first of the milk-teeth is generally cut about the sixth or seventh month, and the last of the set at various periods from the twentieth to the thirtieth months. Thus the whole period occupied by the first dentition may be estimated at from a year and a half to two years. The process varies, however, in different individuals, both as to its whole duration, and as to the periods and order in which the teeth make their appearance. It is unnecessary, however, to add more upon this point.

1. *Management of the infant when teething is without difficulty.* — In the child of a healthy constitution which has been properly, that is, naturally fed upon the milk of its mother alone, the symptoms attending teething will be of the mildest kind, and the management of the infant most simple and easy.

The symptoms of natural dentition, then, are — an increased flow of saliva, with swelling and heat of the gums, and occasionally flushing of the cheeks. The child frequently thrusts its fingers, or anything within its grasp, into its mouth. Its thirst is increased, and it takes the breast more frequently, though, from the tender state of the gums, for shorter periods than usual. It is fretful and restless, and sudden fits of crying and occasional starting from sleep, with a slight tendency to vomiting, and even looseness of the bowels, are not uncommon. Many of these symptoms often precede the appearance of the tooth by several weeks, and indicate that what is called “breeding the teeth” is going on. In such cases the symptoms disappear in a few days, to recur again when the tooth approaches the surface of the gum.

The management of the infant in this case is very simple, and seldom calls for the interference of the medical attendant. The child ought to be much in the open air, and well exercised; the bowels kept freely open with castor oil; the cold sponging employed daily, and the surface of the

body rubbed dry with as rough a flannel as the delicate skin of the child will bear, friction being very useful. The breast should be given often, but not long at a time ; the thirst will thus be allayed, the gums kept moist and relaxed, and their irritation soothed, without the stomach being overloaded. The mother must carefully attend, at this time, to her own health and diet, and avoid all stimulant food or drinks.

From the moment dentition begins, pressure on the gums seems to be agreeable to the child, by numbing the sensibility and dulling the pain. For this purpose coral is usually employed, or a piece of orris-root, or scraped liquorice-root ; a flat ivory ring, however, is far safer and better, for there is no danger of its being thrust into the eyes or nose. Gentle friction of the gums, by the finger of the nurse, is pleasing to the infant ; and, as it seems to have some effect in allaying irritation, may be frequently used. In France, and in this country also, it is very much the practice to dip the liquorice-root and other substances into honey, powdered sugar-candy, &c. ; and in Germany, a small bag, containing a mixture of sugar and spices, is given to the infant to suck, whenever it is fretful and uneasy during teething. The constant use, however, of sweet and stimulating ingredients, must do injury to the stomach, and renders their employment very objectionable.

2. *The management of the infant in difficult teeth.*

—In the child which has been partly or altogether brought up by hand, or who is of a feeble and delicate constitution, or imbued with any hereditary taint, the process of dentition will be attended with more or less difficulty, and not unfrequently with danger.

The symptoms of difficult dentition are of a much more aggravated description than those which attend the former case ; and it is right that a mother should, to a certain extent, be acquainted with their character, that she may early request that medical aid, which, if judiciously applied, will mitigate, and generally quickly remove them.

Difficult dentition will be attended with painful inflammation and swelling of the gum, which is hotter, of a deeper red than natural, and intolerant of the slightest pressure. There is often great determination of blood to the head, which a mother may recognise by the cheeks being red, hot, and swollen ; the eyes red, irritable, and watery ; and the saliva running from the mouth profusely. The fever is great, and the thirst extreme. The child is at one time restless and irritable, and at another heavy and oppressed : the sleep will be broken, and the infant frequently awake suddenly and in alarm from its short slumbers.

Such are the chief symptoms of difficult teething ; and as they are induced by the painful tension of the gum, it would seem that the most rational mode of attempting their relief is by freely lancing

the swollen part. Great prejudices, however, exist in the minds of some mothers against this operation. They think it gives great pain, and if the tooth is not very near, causes it to come through the gum, subsequently, with greater difficulty. With regard to the first objection, the lancet is carried through the gum so quickly that this is hardly possible; and the fact that the infant will often smile in your face after it is done, although previously crying from pain, is sufficient corroborative evidence that it is not a very painful operation. In reference to the second, that the scar which ensues opposes, by its hardness, the subsequent progress of the tooth, it is quite groundless; for cicatrices, like all other new-formed parts, are much more easily absorbed than the original structure. Of the practical utility and perfect safety of this operation, we have ample proof in its daily performance with impunity, and in the instant relief which it often affords to all the symptoms.

Mere scarifying the gums is sometimes all that is required, and will afford great relief. This operation, therefore, should not be opposed by the mother. She, at the same time, should be acquainted with its precise object, lest the speedy return of the symptoms, and the non-appearance of the expected tooth, might tend to bring the operation of lancing the gums into disrepute.

It is the practice with some nurses to administer narcotics to quiet infants while teething; it is not

only objectionable, but, from the uncertain effects of sedatives upon infants, a very dangerous practice, and they ought never to be given, except at the suggestion of a medical man. It is far better, if the child is restless at night, to have it frequently taken out of its cot, and carried about in an airy room; for the cool air, and change of posture, will do much to allay the feverishness and restlessness of the child.

Convulsions are sometimes excited by the irritation of difficult dentition; a source of great alarm to the patient. Relief will be afforded by immersing the hips, legs, and feet of the infant in water as warm as can be borne, and at the same time applying, over the head and temples, a piece of flannel wet with cold water, or sprinkling cold water in the child's face. This will often cut short the fit. The gums should be looked to; and if they appear swollen and painful, lanced. I have known the most formidable convulsions to cease immediately after this operation.

The parental management of the infant then, and by which much of the pain and difficulty of teething may be removed or alleviated, consists in a proper attention to cold sponging, air, exercise, food, and bowels; for, by duly regulating these, the system of the child will be less disposed to diseased action, though the local symptoms, such as swelling, redness, and inflammation of the gums, be considerable.

With regard to food, if a child is teething with difficulty, it should always have its quantity diminished. If it is being fed, as well as nursed at the breast, at the time, the former should be immediately withheld; if it is being fed alone, the only kind of food that should be allowed is milk and water.

These cases are much aggravated by the not uncommon habit of giving the infant food whenever it cries from the irritation attending upon the process; and thus a slightly difficult dentition is converted into serious disease.

The bowels must be carefully watched, that they may not become confined, it being necessary that they should be gently relaxed at this time; so that if a slight diarrhoea be present, it must not be checked: if it passes beyond this, however, medicine must be prescribed, and the lower part of the body be put into a warm bath, and warmly clothed. The head should be washed with cold water night and morning, and no other covering than that which nature has provided this part should be put upon it when within doors or asleep; and on no occasion should warm felt hats be worn during mild or warm weather, thin straw hats being lighter and cooler. The child ought also to be much in the open air.

To the state of the mouth, however, it is an important part of the parent's duty to pay especial attention; and by so doing she will save her child much suffering. The mother should carefully in-

spect the condition of the mouth from time to time ; and should she discover a swollen gum, she should immediately have it attended to, and not wait for constitutional symptoms to appear before she employs proper aid for her child. For this purpose she should make herself familiar with the appearances of the gum under distension and inflammation ; a matter of no difficulty, accompanied, as this condition usually is, by a profuse secretion of saliva, heat of mouth, and at a time when the age of the child justifies the supposition that it is about to cut its first tooth, or if it have some teeth, that others are about to appear.

From these few hints, it must have been seen how much the sufferings from teething may be mitigated by judicious management.—That, if the parent is able to support her infant upon the breast alone, teething is comparatively an easy process, and unattended with danger ; the mother thus reaping a delightful reward for all the anxieties and privations nursing necessarily involves.

That the child brought up partially or entirely by hand, will always pass through dentition with more or less of pain and difficulty ; but that, even here, if the diet has been properly regulated, much less suffering and inconvenience will arise than when less attention has been paid to it.

And, lastly, that when dentition is difficult, how highly important it is to call in proper aid at an early period, and to carry out fully the directions of the

medical attendant, allowing no foolish prejudices to interfere with his prescriptions and management.

The subjects comprising this chapter are but slightly sketched. For a more full and detailed account of the principles which should guide the parent in the management of her offspring during their infancy and childhood, together with directions for the maternal management of those diseases to which these epochs are especially liable, the Author must refer the reader to his work lately published, entitled "The Maternal Management of Children in Health and Disease."

A P P E N D I X.

A P P E N D I X.

IT has been thought that the value of Dr. Bull's work would be increased by adding, in the form of an Appendix, the substance of a book, by Dr. A. F. A. Desoerger, of Erfurt, which has been translated from the German, under the title of the "LADIES' PERPETUAL CALENDAR." The translator remarks in relation to it, that "its utility must be at once apparent to every lady who favours it with her inspection. In Germany, its popularity is very considerable, as it tenders the service of a faithful and confidential friend, especially to the young and newly married, in matters of urgent interest—where the inexperienced might hesitate, or not even know how to go about to ask advice."

"The manner of reckoning with reference to the time of expected confinement, is a subject which the sex—particularly the junior members of it—ought clearly to understand. Much time is saved, and often great anxiety avoided, by being able confidently to approximate to the hour of solicitude and hope. In point of economy, too, it is submitted, that the advantage of bespeaking the assistance of the medical and other attendants at the proper time, is not to be overlooked: while to the latter parties, neither is it of little consequence that they are not kept in suspense—perhaps suffering serious disappointment—owing to the miscalculations of their patient."

The most valuable part of this book is the calendar, which is used as follows: The regular period of pregnancy—or the time from conception till confinement—is ten lunar months, or forty weeks, which amount to 280 days. It is frequently calculated at nine calendar months, that is to say, 273 days, or thirty-nine weeks: but we have reason to consider forty weeks as the safer reckoning. When the date of conception is known, the reckoning begins from that day. If the time of conception be not known, then the reckoning must commence from the day of the last monthly appearance. Look for this date in the first column of the following tables, under the proper month, and the corresponding dates of the middle and end of pregnancy will be found standing in the same line.

If neither the day of conception be known, nor the period of the last appearance be recollectcd—then, the time of *quickening*, or when the first motions of the child were perceived, must be made use of. Finding this date in the middle column of the table, the respective dates of the beginning and end of pregnancy will be found to correspond. Thus, suppose the day of quickening to be the 14th of March: look for that table in which March stands in the *middle column* (the October table), and it will be seen that the confinement may be expected on the 2d of August. We give the various saints' days and holydays in the calendar, because it is the custom with many women to reckon from dates of that description. The moveable feasts, however, such as Easter, Whitsuntide, &c., are omitted, as less suited for the purpose. By the "Beginning," in the following tables, we mean the time of *conception*; by the "Middle," the period of *quickening*; and by the "End," the time of *labour*.

JANUARY.

JANUARY.

Beginning.	Middle.	End.
JANUARY.	MAY.	OCTOBER.
1 CIRCUMCISION 2 Abel 3 Enoch 4 Titus 5 Simeon 6 EPIPHANY 7 Melchior 8 Lucian 9 Caspar 10 Paul Hermit 11 Erhard 12 Reynold	20 Frances 21 Prudens 22 Helena 23 Desiderius 24 Esther 25 Urban 26 Augustine 27 Bede 28 William 29 Maximilian 30 Wigan 31 Petronella	8 Ephraim 9 Denys 10 Amelia 11 Burkard 12 Erenfried 13 Edward Conf. 14 William 15 Hedwig 16 Gallus 17 Etheldreda 18 LUKE 19 Ptolemy
13 Hilarius 14 Felix 15 Habakkuk 16 Marcellus 17 Anthony 18 Prisca 19 Ferdinand 20 Fabian 21 Agnes 22 Vincent 23 Emerantia 24 Timothy	1 Nicomede 2 Macarius 3 Erasmus 4 Ulrica 5 Boniface 6 Benignus 7 Lucretia 8 Medard 9 Barnimus 10 Onuphrius 11 BARNABAS 12 Blandina	20 Wendelia 21 Ursula 22 Corduca 23 Severus 24 Solomon 25 Crispin 26 Amandus 27 Sabina 28 SIMON and JUDE 29 Engelard 30 Hartmen 31 Wolfgang
25 PAUL 26 Polycarp 27 Chrysostom 28 Charles 29 Samuel 30 Adelgunda 31 Valerius	13 Tobias 14 Modestus 15 Vitus 16 Justin 17 Alban 18 Paulina 19 Gervase	NOVEMBER. 1 ALL SAINTS 2 All Souls 3 Gotlieb 4 Charlotte 5 Eric 6 Leonard 7 Erdman

F E B R U A R Y

FEBRUARY.

Beginning.	Middle.	End.
FEBRUARY.	JUNE.	NOVEMBER.
1 Bridget 2 Purific. of Mary 3 Blaise 4 Veronica 5 Agatha 6 Dorothea 7 Richard 8 Solomon 9 Apollonia 10 Renata 11 Euphrosyne	20 Edward 21 Jacobina 22 Acharius 23 Basilius 24 JOHN BAPTIST 25 Elogius 26 Jeremias 27 Seven Sleepers 28 Leo 29 PETER and PAUL 30 Paul	8 Claude 9 Theodore 10 Jonas 11 Martin 12 Cunibert 13 Britius 14 Lewin 15 Machutus 16 Ottoman 17 Hugh 18 Gotschalk
	: t : s.	
12 Severinus 13 Benigna 14 Valentine 15 Formosus 16 Julianus 17 Constantia 18 Concordia 19 Susanna 20 Eucharius 21 Eleanor 22 Peter 23 Reynard	1 Theobald 2 Visita. of Mary 3 Cornelius 4 Martin 5 Anselm 6 Isaiah 7 Thom. à Becket 8 Kilian 9 Cyril 10 Felicity 11 Pius 12 Henry	19 Elisabeth 20 Edmund 21 Presentation 22 Cecilia 23 Clement 24 Lebrecht 25 Catharine 26 Conrade 27 Lot 28 Gunter 29 Noah 30 ANDREW
		DECEMBER.
24 MATTHIAS 25 Victor 26 Nestor 27 Hector 28 Justus	13 Margaret 14 Bonaventure 15 Swithin 16 Enstace 17 Alexis	1 Arnold 2 Candida 3 Cassian 4 Barbara 5 Abigail

M A R C H

M A R C H.

Beginning.	Middle.	End.
MARCH.	JULY.	DECEMBER.
1 Albin	18 Caroline	6 Nicholas
2 Louisa	19 Ruth	7 Antonia
3 Cunigund	20 Elias	8 Conception
4 Adrian	21 Daniel	9 Joachim
5 Frederick	22 Magdalene	10 Judith
6 Everard	23 Albertine	11 Waldemar
7 Perpetua	24 Christine	12 Epimachius
8 Philemon	25 JAMES	13 Lucy
9 Prudentius	26 Anne	14 Israel
10 Henrietta	27 Berthold	15 Johanna
11 Rosina	28 Innocent	16 Ananias
12 Gregory, M.	29 Martha	17 Lazarus
13 Ernest	30 Beatrice	18 Christopher
14 Zacchary	31 Germain	19 Manasses
AUGUST.		
15 Isabella	1 Peter	20 Abraham
16 Syriac	2 Gustavus	21 THOMAS
17 Patrick	3 Augustus	22 Beata
18 Edward	4 Perpetua	23 Ignatius
19 Joseph	5 Dominick	24 Adam and Eve
20 Rupert	6 Transfiguration	25 CHRIST BORN
21 Benedict	7 Donatus	26 STEPHEN
22 Casimer	8 Ladislaus	27 JOHN
23 Everard	9 Romanus	28 INNOCENTS
24 Gabrial	10 Lawrence	29 Jonathan
25 Annunciation	11 Titus	30 David
26 Emanuel	12 Clara	31 Sylvester
JANUARY.		
27 Hubert	13 Hildebrand	1 CIRCUMCISION
28 Gideon	14 Eusebius	2 Abel
29 Eustace	15 Assumption	3 Enoch
30 Guido	16 Isaac	4 Titus
31 Philip	17 Bertram	5 Simeon

A P R I L

APRIL.

BEGINNING.	MIDDLE.	END.
APRIL.	AUGUST.	JANUARY.
1 Theodore 2 Theodosia 3 Christian 4 Ambrose 5 Maximus 6 Sixtus 7 Celestine 8 Heilman 9 Bogislaus 10 Ezekiel 11 Herman 12 Julius 13 Justin 14 Tiburtius	18 Emilia 19 Sebald 20 Bernard 21 Athanasius 22 Oswald 23 Zaccheus 24 BARTHOLOMEW 25 Lewis 26 Irenæus 27 Gebard 28 Augustine 29 John 30 Benjamin 31 Rebecca	6 EPIPHANY 7 Melchior 8 Lucian 9 Caspar 10 Paul Hermit 11 Erhard 12 Reynold 13 Hilarius 14 Felix 15 Habakkuk 16 Marcellus 17 Anthony 18 Prisca 19 Ferdinand
	SEPTEMBER.	
15 Obadiah 16 Cariseus 17 Rodolph 18 Florence 19 Werner 20 Sulpitius 21 Adolphus 22 Lothario 23 GEORGE 24 Albert 25 MARK 26 Raymar	1 Giles 2 Rachel 3 Mansuetus 4 Moses 5 Nathaniel 6 Magnus 7 Enurchus 8 Mary 9 Bruno 10 Sosthenes 11 Gerard 12 Otilia	20 Fabian 21 Agnes 22 Vincent 23 Emerantia 24 Timothy 25 PAUL 26 Polycarp 27 Chrysostom 28 Charles 29 Samuel 30 Adelgunda 31 Valerius
		FEBRUARY.
27 Anastasius 28 Theresa 29 Sibylla 30 Joshua	13 Christlieb 14 Exaltation 15 Constantia 16 Euphemia n	1 Bridget 2 Purific. of Mary 3 Blaise 4 Veronica

M A P

M A Y.

Beginning.	Middle.	End.
MAY.	SEPTEMBER.	FEBRUARY.
1 PHILIP & JAMES 2 Sigismund 3 Holy Cross 4 Florian 5 Gothard 6 John Evangelist 7 Godfrey 8 Stanislaus 9 Job 10 Gordian 11 Mamertus 12 Pancratius 13 Servatius 14 Christiana	17 Lambert 18 Sigfred 19 Januarius 20 Frederica 21 MATTHEW 22 Maurice 23 Joel 24 John 25 Cleophas 26 Cyprian 27 Cosmo 28 Wenzel 29 MICHAEL 30 Jerome	5 Agatha 6 Dorothea 7 Richard 8 Solomon 9 Apollonia 10 Renata 11 Euphrasyne 12 Severinus 13 Benigna 14 Valentine 15 Formosus 16 Juliana 17 Constantia 18 Concordia
	OCTOBER.	
15 Sophia 16 Honoratus 17 Pascal 18 Livorius 19 Dunstan 20 Frances 21 Prudens 22 Helena 23 Desiderius 24 Esther	1 Remigius 2 Volrade 3 Ewald 4 Francis 5 Charity 6 Faith 7 Hope 8 Ephraim 9 Denys 10 Amelia	19 Susanna 20 Eucharius 21 Eleanor 22 Peter 23 Reynard 24 MATTHIAS 25 Victor 26 Nestor 27 Hector 28 Justus
		MARCH.
25 Urban 26 Augustine 27 Bede 28 William 29 Maximilian 30 Wigan 31 Petronella	11 Burkard 12 Erenfried 13 Edward Conf. 14 William 15 Hedwig 16 Gallus 17 Etheldreda	1 Albin 2 Louisa 3 Cunigund 4 Adrian 5 Frederick 6 Everard 7 Perpetua

J U N E.

JUNE.

Beginning.	Middle.	End:
JUNE.	OCTOBER.	MARCH.
1 Nicomede 2 Macarius 3 Erasmus 4 Ulrica 5 Boniface 6 Benignus 7 Lucretia 8 Mcdard 9 Barnimus 10 Onuphrius 11 BARNABAS 12 Blandina 13 Tobias 14 Modestus	18 LUKE 19 Ptolemy 20 Wendelia 21 Ursula 22 Corduca 23 Severus 24 Solomon 25 Crispin 26 Amandus 27 Sabina 28 SIMON and JUDE 29 Engelard 30 Hartman 31 Wolfgang	8 Philemon 9 Prudentius 10 Henrietta 11 Rosina 12 Gregory, M. 13 Ernest 14 Zacchary 15 Isabella 16 Syriac 17 Patrick 18 Edward 19 Joseph 20 Rupert 21 Benedict
15 Vitus 16 Justina 17 Alban 18 Paulina 19 Gervase 20 Edward 21 Jacobina 22 Acharius 23 Basilius 24 JOHN BAPTIST	NOVEMBER. 1 ALL SAINTS 2 All Souls 3 Gotlieb 4 Charlotte 5 Eric 6 Leonard 7 Erdman 8 Claude 9 Theodore 10 Jonas	22 Casimer 23 Everard 24 Gabriel 25 Annunciation 26 Emanuel 27 Hubert 28 Gideon 29 Eustace 30 Guido 31 Philip
25 Elogius 26 Jeremias 27 Seven Sleepers 28 Leo 29 PETER and PAUL 30 Paul	11 Martin 12 Cunibert 13 Britius 14 Lewin 15 Machutus 16 Ottoman	APRIL. 1 Theodore 2 Theodosia 3 Christian 4 Ambrose 5 Maximus 6 Sixtus

J U L Y .

JULY.

Beginning.	Middle.	End.
JULY.	NOVEMBER.	APRIL.
1 Theobald 2 Visita. of Mary 3 Cornelius 4 Martin 5 Anselm 6 Isaiah 7 Thom. à Becket 8 Kilian 9 Cyril 10 Felicity 11 Pius 12 Henry 13 Margaret 14 Bonaventure	17 Hugh 18 Gotschalk 19 Elisabeth 20 Edmund 21 Presentation 22 Cecilia 23 Clement 24 Lebrecht 25 Catharine 26 Conrade 27 Lot 28 Gunter 29 Noah 30 ANDREW	7 Celestine 8 Heilman 9 Bogislaus 10 Ezekiel 11 Herman 12 Julius 13 Justin 14 Tiburtius 15 Obadjah 16 Carisius 17 Rodolph 18 Florence 19 Werner 20 Sulpitius
	DECEMBER.	
15 Swithin 16 Enstace 17 Alexis 18 Caroline 19 Ruth 20 Elias 21 Daniel 22 Magdalen 23 Albertine 24 Christine	1 Arnold 2 Candida 3 Cassian 4 Barbara 5 Abigail 6 Nicholas 7 Antonia 8 Conception 9 Joachim 10 Judith	21 Adolphus 22 Lothario 23 GEORGE 24 Albert 25 MARK 26 Raymar 27 Anastasius 28 Theresa 29 Sibylla 30 Joshua
		MAY.
25 JAMES 26 Anne 27 Berthold 28 Innocent 29 Martha 30 Beatrice 31 Germain	11 Waldemar 12 Epimachus 13 Lucy 14 Israel 15 Johanna 16 Ananias 17 Lazarus	1 PHILIP & JAMES 2 Sigismund 3 Holy Cross 4 Florian 5 Gothard 6 John Evangelist 7 Godfrey

A U G U S T.

AUGUST.

Beginning.	Middle.	End.
AUGUST.	DECEMBER.	MAY.
1 Peter 2 Gustavus 3 Augustus 4 Perpetua 5 Dominick 6 Transfiguration 7 Donatus 8 Ladislaus 9 Romanus 10 Lawrence 11 Titus 12 Clara 13 Hildebrand 14 Eusebius	18 Christopher 19 Manasses 20 Abraham 21 THOMAS 22 Beata 23 Ignatius 24 Adam and Eve 25 CHRIST BORN 26 STEPHEN 27 JOHN 28 INNOCENTS 29 Jonathan 30 David 31 Sylvester	8 Stanislaus 9 Job 10 Gordian 11 Mamertus 12 Pancratius 13 Servatius 14 Christiana 15 Sophia 16 Honoratus 17 Pascal 18 Livorius 19 Dunstan 20 Frances 21 Prudens
15 Assumption 16 Isaac 17 Bertram 18 Emilia 19 Sebald 20 Bernard 21 Athanasius 22 Oswald 23 Zacchaeus 24 BARTHOLOMEW	1 CIRCUMCISION 2 Abel 3 Enoch 4 Titus 5 Simeon 6 EPIPHANY 7 Melchior 8 Lucian 9 Caspar 10 Paul Hermit	22 Helena 23 Desiderius 24 Esther 25 Urban 26 Augustine 27 Bede 28 William 29 Maximilian 30 Wigan 31 Petronella
25 Lewis 26 Irenæus 27 Gebard 28 Augustine 29 John 30 Benjamin 31 Rebecca	11 Erhard 12 Reynold 13 Hilarius 14 Felix 15 Habakkuk 16 Marcellus 17 Anthony	1 Nicomede 2 Macarius 3 Erasmus 4 Ulrica 5 Boniface 6 Benignus 7 Lucretia
JANUARY.		
JUNE.		

S E P T E M B E R.

SEPTEMBER.

Beginning.	Middle.	End.
SEPTEMBER.	JANUARY.	JUNE.
1 Giles	18 Prisca	8 Medard
2 Rachel	19 Ferdinand	9 Barnimus
3 Mansuetus	20 Fabian	10 Onuphrius
4 Moses	21 Agnes	11 BARNABAS
5 Nathaniel	22 Vincent	12 Blandina
6 Magnus	23 Emerantia	13 Tobias
7 Enúrchus	24 Timothy	14 Modestus
8 Mary	25 PAUL	15 Vitus
9 Bruno	26 Polycarp	16 Justina
10 Sosthenes	27 Chrysostom	17 Alban
11 Gerard	28 Charles	18 Paulina
12 Otilia	29 Samuel	19 Gervase
13 Christlieb	30 Adelgunda	20 Edward
14 Exaltation	31 Valerius	21 Jacobina
	FEBRUARY.	
15 Constantia	1 Bridget	22 Acharius
16 Euphemia	2 Purif. of Mary	23 Basilius
17 Lambert	3 Blaise	24 JOHN BAPTIST
18 Sigfred	4 Veronica	25 Elogius
19 Januarius	5 Agatha	26 Jeremias
20 Frederica	6 Dorothea	27 Seven Sleepers
21 MATTHEW	7 Richard	28 Leo
22 Maurice	8 Solomon	29 PETER & PAUL
23 Joel	9 Apollonia	30 Paul
		JULY.
24 John	10 Renata	1 Theobald
25 Cleophas	11 Euphrosyne	2 Visit. of Mary
26 Cyprian	12 Severinus	3 Cornelius
27 Cosmo	13 Benigna	4 Martin
28 Wenzel	14 Valentine	5 Anselm
29 MICHAEL	15 Formosus	6 Isaiah
30 Jerome	16 Juliana	7 Thom. à Becket

O C T O B E R

O C T O B E R.

Beginning.	Middle.	End.
OCTOBER.	FEBRUARY.	JULY.
1 Remigius 2 Volrade 3 Ewald 4 Francis 5 Charity 6 Faith 7 Hope 8 Ephraim 9 Denys 10 Amelia 11 Burkard 12 Erenfried	17 Constantia 18 Concordia 19 Susanna 20 Eucharius 21 Eleanor 22 Peter 23 Reynard 24 MATTHIAS 25 Victor 26 Nestor 27 Hector 28 Justine	8 Kilian 9 Cyril 10 Felicity 11 Pius 12 Henry 13 Margaret 14 Bonaventure 15 Swithin 16 Enstace 17 Alexis 18 Caroline 19 Ruth
	MARCH.	
13 Edward Conf. 14 William 15 Hedwig 16 Gallus 17 Etheldreda 18 LUKE 19 Ptolemy 20 Wendelia 21 Ursula 22 Corduca 23 Severus 24 Solomon	1 Albin 2 Louisa 3 Cunigund 4 Adrian 5 Frederick 6 Everard 7 Perpetua 8 Philemon 9 Prudentius 10 Henrietta 11 Rosina 12 Gregory, M.	20 Elias 21 Daniel 22 Magdalen 23 Albertine 24 Christine 25 JAMES 26 Anne 27 Berthold 28 Innocent 29 Martha 30 Beatrice 31 Germain
	AUGUST.	
25 Crispin 26 Amandus 27 Sabina 28 SIMON and JUDE 29 Engelard 30 Hartman 31 Wolfgang	13 Ernest 14 Zacchary 15 Isabella 16 Syriac 17 Patrick 18 Edward 19 Joseph	1 Peter 2 Gustavus 3 Augustus 4 Perpetua 5 Dominick 6 Transfiguration 7 Donatus

N O V E M B E R

NOVEMBER.

Beginning.	Middle.	End.
NOVEMBER.	MARCH.	AUGUST.
1 ALL SAINTS	20 Rupert	8 Ladislaus
2 All Souls	21 Benedict	9 Romanus
3 Gotlieb	22 Casimer	10 Lawrence
4 Charlotte	23 Everard	11 Titus
5 Eric	24 Gabriel	12 Clara
6 Leonard	25 Annunciation	13 Hildebrand
7 Erdnian	26 Emanuel	14 Eusebius
8 Claude	27 Hubert	15 Assumption
9 Theodore	28 Gideon	16 Isaac
10 Jonas	29 Eustace	17 Bertram
11 Martin	30 Guido	18 Emilia
12 Cunibert	31 Philip	19 Sebald
APRIL.		
13 Britius	1 Theodore	20 Bernard
14 Lewin	2 Thcodosia	21 Athanasius
15 Machutus	3 Christian	22 Oswald
16 Ottoman	4 Ambrose	23 Zacheus
17 Hugh	5 Maximus	24 BARTHOLOMEW
18 Gotschalk	6 Sixtus	25 Lewis
19 Elisabeth	7 Celestine	26 Irenaeus
20 Edmund	8 Heilman	27 Gebard
21 Presentation	9 Bogislaus	28 Augustine
22 Cecilia	10 Ezekiel	29 John
23 Clement	11 Herman	30 Benjamin
24 Lebrecht	12 Julius	31 Rebecca
SEPTEMBER.		
25 Catharine	13 Justin	1 Giles
26 Conrade	14 Tiburtius	2 Rachel
27 Lot	15 Obadiah	3 Mansuetus
28 Gunter	16 Carisius	4 Moses
29 Noah	17 Rodolph	5 Nathaniel
30 ANDREW	18 Florence	6 Magnus

D E C E M B E R

DECEMBER.

BEGINNING.	MIDDLE.	END.
DECEMBER.	APRIL.	SEPTEMBER.
1 Arnold 2 Candida 3 Cassian 4 Barbara 5 Abigail 6 Nicholas 7 Antonia 8 Conception 9 Joachim 10 Judith 11 Waldemar 12 Epimachus	19 Werner 20 Sulpitius 21 Adolphus 22 Lothario 23 GEORGE 24 Albert 25 MARK 26 Raymar 27 Anastasius 28 Theresa 29 Sibylla 30 Josrua	7 Enurchus 8 Mary 9 Bruno 10 Sosthenes 11 Gerard 12 Otilia 13 Christlieb 14 Exaltation 15 Constantia 16 Euphemia 17 Lambert 18 Sigfried
13 Lucy 14 Israel 15 Johanna 16 Ananias 17 Lazarus 18 Christopher 19 Manasses 20 Abraham 21 THOMAS 22 Beata 23 Ignatius 24 Adam and Eve	1 PHILIP & JAMES 2 Sigismund 3 Holy Cross 4 Florian 5 Gothard 6 John Evangelist 7 Godfrey 8 Stanislaus 9 Job 10 Gordian 11 Mameritus 12 Pancratius	19 Januarius 20 Frederica 21 MATTHEW 22 Maurice 23 Joel 24 John 25 Cleophas 26 Cyprian 27 Cosmo 28 Wenzel 29 MICHAEL 30 Jerome
25 CHRIST BORN 26 STEPHEN 27 JOHN 28 INNOCENTS 29 Jonathan 30 David 31 Sylvester	13 Servatius 14 Christiana 15 Sophia 16 Honoratus 17 Pascal 18 Livorius 19 Dunstan	OCTOBER. 1 Remigius 2 Volrade 3 Ewald 4 Francis 5 Charity 6 Faith 7 Hope



